

Jacqueline M. Izzo
Mayor



Matthew Andrews
Deputy Director of Community
& Economic Development

DEPARTMENT OF COMMUNITY AND ECONOMIC DEVELOPMENT

Rome City Hall, 198 N. Washington Street, Rome, New York 13440-5815
Telephone: (315) 339-7643 Fax: (315) 838-1167

Narrative Information Sheet

1. Applicant Identification

City of Rome
Rome City Hall
198 N. Washington Street
Rome, NY 13440-5815

2. Funding Requested

- a. Grant Type : Single Site Cleanup
- b. Federal Funds Requested:
 - i. \$200,000
 - ii. The City of Rome is not requesting a cost share waiver.
- c. Contamination: Petroleum

3. Location

The City of Rome, Oneida County, New York

4. Property Information for Site-Specific Proposals

701 Lawrence Street Site
701 Lawrence Street
Rome, NY 13440-5815

5. Contacts

- a. Project Director:
Diana J. Samuels
City of Rome
Rome City hall
198 N. Washington Street
Rome, NY 13440-5815
Phone: (315) 339-7646
Email: dsamuels@romecitygov.com

b. Chief Executive Officer:
Mayor Jacqueline M. Izzo
City of Rome
Rome City Hall
198 N. Washington Street
Rome, NY 13440-5815
Phone: (315) 339-7677
Email: mayor@romecitygov.com

6. **Population**

Population of Rome: 33,725

7. **Other Factors Checklist**

Other Factors:

The priority site(s) is adjacent to a body of water

1

8. **Letter from the State of Tribal Environmental Authority**

Please refer to the attached acknowledgement letter from the New York State Department of Environmental Conservation (NYSDEC).

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Bureau of Program Management

625 Broadway, 12th Floor, Albany, NY 12233-7012

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January 11, 2019

Honorable Jacqueline M. Izzo, Mayor
City of Rome
198 N. Washington Street
Rome, NY 13440

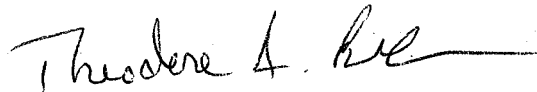
Dear Mayor Izzo:

This is to acknowledge that the New York State Department of Environmental Conservation (DEC) received a request from City of Rome's consultant, Barton & Loguidice, dated January 4, 2019, for a state acknowledgement letter for a Federal Year 2019 United States Environmental Protection Agency (USEPA) Brownfields grant.

I understand that the City of Rome plans to submit a Brownfield Cleanup Grant application in the amount of \$200,000. Funding will be utilized to perform petroleum cleanup activities at 701 Lawrence Street, Site No. E633063 (Operable Unit 1), and to conduct associated redevelopment planning and community involvement activities.

DEC encourages initiatives to redevelop brownfields with the goal of mitigating any environmental and health impacts that they might pose.

Sincerely,



Theodore Bennett
Director
Bureau of Program Management

cc: T. Wesley, USEPA Region 2
J. Brown, DEC Albany
P. Taylor, DEC Region 6
S. LeFevre, Barton & Loguidice



Department of
Environmental
Conservation

1. Project Area Description and Plans for Revitalization (30 points)**1.a. Target Area and Brownfields (8 points)****1.a.i. Background and Description of Target Area (3 points)**

The City of Rome is located in Oneida County in the geographical center of New York State. Home to over 33,000 residents, the City of Rome is situated at the foothills of the Adirondack Mountains and is located approximately 45 miles east of Syracuse, NY. Incorporated in 1870, the growth of the City was directly attributed to historical movements, including the fortification of the British Fort Stanwix during the American Revolutionary War and development of the Erie Canal in the 1790s. Strategically located at the confluence of the Mohawk River and the Erie Canal, the City of Rome was once considered one of the most important transportation hubs for moving goods and services from New York City and the Atlantic Seaboard to the Great Lakes. During the Industrial Revolution, Rome gained the reputation as the "Copper City", and was home to many significant metal industries, such as Revere Copper, Rome Cable, and General Cable. From 1950-1995, the City of Rome was the home of Griffiss Air Force Base, a former United States Air Force installation, that served as a significant regional employer.

Much of Rome's industry was concentrated in the downtown area and immediate vicinity, as well as along the Erie Canal. As such, many of the industrialized areas in the City were located immediately adjacent to residential neighborhoods. As Rome's manufacturing industries collapsed from the late 1960s through the early 2000s, the City was left with a number of contaminated and environmentally hazardous vacant and abandoned industrial sites, including Griffiss Air Force Base, which was declared a Superfund Site in 1995. However, the City has viewed these former industrial sites as opportunities for new investment and development in downtown, with the goal of attracting new employers, residents and visitors. The City of Rome has a successful track record of bringing brownfield and underutilized sites back into productive use. Specifically, the City of Rome has successfully participated in the New York State Department of Environmental Conservation (NYSDEC) Environmental Restoration Program (ERP) to remediate a number of municipally-owned Brownfield sites throughout the community.

In 2006, the City of Rome was one of the first communities in New York State to receive Brownfield Opportunity Area (BOA) funding through the NYS Department of State (DOS) to develop a community-based revitalization plan for a 513-acre area referred to as the Downtown Rome BOA. This 513 acre area, of which approximately one-third contains Brownfield sites, includes the downtown area, the former Rome Cable Brownfield site, and the 701 Lawrence Street ERP Brownfield site, which is the subject of this EPA Brownfields Cleanup Grant request. Straddling the confluence of the Mohawk River and Erie Canal, the Waterfront Village subarea of the Downtown Rome BOA boasts nearly a mile of waterfront property, including the 701 Lawrence Street site which consists of 1.85 acres of prime undeveloped waterfront property.

The 701 Lawrence Street site provides immediate access to the Canalway Trail which consists of a paved, multi-use recreational pathway that extends along the shoreline of the Erie Canal for 2.5 miles from South James Street to Rome Oriskany Road. The recent construction of the 2.5 mile long Canalway Trail and the associated 4 mile long Mohawk River Trail have contributed significantly to the attractiveness of the Waterfront Village subarea, and in particular the 701 Lawrence Street Brownfield site. In addition, the City of Rome has made significant improvements to this particular section of the Erie Canal, which include a terraced promenade and viewing overlooks. Therefore with the use of EPA Brownfields Cleanup Grant funds, the City can move forward with the cleanup and redevelopment of the 701 Lawrence Street

Brownfield site for future use as a multi-use facility that may potentially consist of kayak and rowing storage spaces, along with a small commercial/ residential mixed use complex.

1.a.ii. Description of the Brownfield Site (5 points)

The 701 Lawrence Street site was historically utilized as a petroleum bulk storage facility beginning circa 1936 and lasting until May 1990. City of Rome directories list Socony Vacuum Oil as the occupant of the property from 1936 until 1956, while the Assessor's records list Socony Mobil Oil Co. as the owner of seven petroleum aboveground storage tanks (ASTs) that ranged in capacity from 16,000 gallons to 1.15 million gallons. Gasoline and fuel oil products were stored in the tanks, and the ASTs were decommissioned and removed from the site in May 1990. Several petroleum spills have occurred at the 701 Lawrence Street site, and significant subsurface contamination has been documented, including the detection of volatile organic constituents and petroleum hydrocarbons in groundwater. Specifically, four NYSDEC spill numbers (8401531, 851569, 876432, and 901000) were assigned to the site in 1984, 1985, 1987, and 1990, respectively, as the result of poor housekeeping practices. These NYSDEC spill numbers were subsequently classified by the Department as "closed, cleanup meets standards."

During the period of August 2007 through October 2013, a total of 33 test pits, 25 soil borings, and nine groundwater monitoring wells were installed at the site as part of a NYSDEC-approved Remedial Investigation (RI) conducted by Barton & Loguidice, D.P.C (B&L). In conjunction with the performance of the RI, three initial interim remedial measures (IRMs) were conducted to remove and properly dispose of the following items: three underground storage tanks (USTs), an off-site stormwater treatment system, underground petroleum transmission pipelines, 730.23 tons of petroleum contaminated soil, and approximately 7,850 gallons of petroleum contaminated fluids.

Because the City successfully entered the 701 Lawrence Street site into the ERP in 2005, 90% of the engineering and subcontractor costs that were incurred by the City during the performance of the RI and aforementioned IRMs were paid for by New York State. The remaining 10% of the project cost was paid for with the use of EPA Brownfields Assessment Grant funds that the City was awarded in 2004.

As a result of the IRM activities, many of the formerly existing potential sources of contamination at the site have been eliminated, and the potential for future associated contaminant migration minimized. However, residual surface and subsurface petroleum contamination still remains on site, and therefore the NYSDEC determined that a two-foot thick soil cover layer must be installed over the entire 1.85 acre parcel, as stated in their Record of Decision (ROD) dated February 2017. Following the successful construction of the soil cap, the NYSDEC will release the site from the ERP and issue a Certificate of Completion (COC) to the City of Rome. Therefore, with the use of EPA Brownfields Cleanup Grant funds, the City will construct the NYSDEC-required two-foot thick soil cap at the 701 Lawrence Street site in order to receive a COC from the Department and begin marketing the site for redevelopment as prime waterfront property.

1.b. Revitalization of the Target Area (12 points)

1.b.i. Redevelopment Strategy and Alignment with Revitalization Plans (7 points)

The City of Rome Department of Community and Economic Development is overseeing the planning and revitalization process for the Downtown Rome BOA which includes the 701 Lawrence Street Brownfield site. A significant part of the planning process is actively engaging various stakeholder groups and members of the public, as has been done since the BOA planning process began in 2007. In addition to internal staff meetings, the City is working with a BOA

Steering Committee comprised of key stakeholders, community members and City staff. The Steering Committee is charged with providing feedback and guidance for the revitalization vision and recommendations. The City is conducting interviews and meetings with key stakeholders, such as land owners, business owners, non-profit organizations and other interested parties within the BOA. This process helps gain insight into desired goals for specific sites within the BOA boundary, such as the 701 Lawrence Street site, as well as the identification of any constraints that may affect re-use potential. The desired types of uses for this site include a mix of uses that take advantage of the site's unique proximity to the Erie Canal and surrounding green spaces. The preferred end use for the site is envisioned as active, water-enhanced commercial uses on the lower level, with residential, studio or office spaces on the upper stories.

Market analyses specific to the housing sector indicate there is significant demand in the City of Rome for market rate, new build housing options. Combined with its waterfront location and proximity to surrounding residential neighborhoods and Bellamy Harbor Park, 701 Lawrence Street is an ideal location for new residential development. The City has not experienced new market-rate housing growth in over 30 years, which makes it challenging to support both the existing population and attract new residents. Due to the lack of alternate housing types, entrepreneurs, small business owners, and professionals are forced to live in neighboring communities such as New Hartford and Marcy. Recently, DePaul Properties, Inc. has committed to a project that incorporates site improvements associated with the DePaul DeWitt Clinton Apartments, which will be located along the Waterfront and in proximity to 701 Lawrence Street. Improvements, including demolishing an existing school building and pavement (already underway) and construction of two new buildings connecting to the Canalway Trail: a 3-story, (66) unit apartment building, and a 2-story, (14) unit townhouse building. The project will require City Street Improvements, and DePaul Properties will be involved in the cleanup/reuse/planning process of this area.

1.b.ii. Outcomes and Benefits of the Redevelopment Strategy (5 points)

Cleanup and redevelopment of the 701 Lawrence Street site will result in numerous long-term economic and non-economic outcomes that will significantly and positively impact the financial, physical, and environmental health of the City of Rome. Specifically, the adaptive reuse and redevelopment of this property, once it has gone through the cleanup process, will move it from the category of unused parcel to a taxable commercial use. The property tax revenue collected from this site will allow the City to allocate funds towards parks and recreation, capital improvements and additional public resources. Furthermore, the ability to redevelop the site will allow the City to further activate and enhance the waterfront as a major destination within the City/region, providing improved opportunities to enjoy this unique natural and historical feature, as well as to catalyze further private investment on surrounding sites.

The 701 Lawrence Street site consists of prime property along the Erie Canal and the Canalway Trail, and therefore is of interest to Human Technologies Inc. Specifically, as part of an on-going diversification strategy, Human Technologies has placed under contract a 7.5 acre waterfront parcel less than ¼ mile west of the 701 Lawrence Street site. Their commitment is to collaborate with the City of Rome, its residences, other not-for-profits, and for-profit entities to be an integral part of the redevelopment of Rome's waterfront, with the intention of creating employment opportunities for people with disabilities and strengthening the community.

1.c. Strategy for Leveraging Resources (10 points)**1.c.i. Resources Needed for Site Reuse (7 points)**

The City of Rome has shown an impressive and successful track record of leveraging funds between private and public funding, as well as project to project within both the waterfront district and city wide. Funding from the NYS BOA Program has been used for area wide planning activities for 500 acres of urban area, including this strategic site in the amount of \$225,000. The planning monies have brought the identified projects to a predictable implementation phase by identifying cost estimates, funding sources, potential partners, community input, and redevelopment strategies, including predictable end uses.

As previously mentioned, the two sources of funding utilized by the City of Rome to pay for the \$403,375 in engineering and subcontractor costs that were incurred to investigate and conduct IRM activities at the 701 Lawrence Street site consisted of a 90% reimburse-able ERP Grant administered by the NYSDEC, and a \$200,000 EPA Brownfields Assessment Grant. With the use of \$200,000 in EPA Brownfields Cleanup Grant funding and the \$40,000 match provided by the City, the cleanup of the 701 Lawrence Street site, which consists of the installation of a two-foot thick soil cap, will be fully complete. As such, no leveraging of additional funds will be required for the successful completion of the cleanup phase of this project.

With regards to leveraging funds for the future redevelopment of the 701 Lawrence Street site, the City is close to completing the Step 3 BOA Implementation Strategy for their BOA at a cost of \$500,400. Additionally, Waterfront Village subarea planning dollars from the NYS Department of State LWRP in an amount of \$783,000 are also being leveraged. These planning dollars include the planning, design, and construction documents for the area surrounding this site, including streetscape improvements, seawall construction, trail extensions, public promenade construction, kayak launches including public water access, and reconstruction of the original Erie Canal (also known as Clintons Ditch). In 2018, the city was awarded \$502,000 in funding through LWRP, for our James Street Canal Overlook. This is phase I of a multi-phased approach to public improvements within the waterfront village, and 701 Lawrence cleanup is key to the construction of the Lawrence Street Overlook and Erie Launch included in the design. As a vibrant waterfront development within a short walk from approved NYS DRI developments, in conjunction with a \$25 million mixed-income housing development along the Empire State/Erie Canalway Trail, it focuses on securing a rewarding and affordable quality of life for all residents.

1.c.ii. Use of Existing Infrastructure (3 points)

The 701 Lawrence Street site is serviced by municipal water and sewer, electric, and natural gas, therefore the infrastructure necessary for the future development of the site is already in place. The site is easily accessed from Lawrence Street which dead ends before the Erie Canal.

2. Community Need and Community Engagement (20 points)**2.a. Community Need (12 points)****2.a.i. The Community's Need for Funding (3 points)**

The City of Rome's population has been declining since the 1970s with the relocation and outsourcing of manufacturing jobs, as well as the closing of Griffiss Air Force Base in 1995. The impact on the mental and physical health of residents was significant, as school enrollment declined, businesses lost customers, and real estate prices plummeted. Prior to its closing, Griffiss Air Force Base employed over 5,000 people and represented 30% of the City's economic base. The Base was a source of City pride and responsible for the success of area businesses.

As a result of the economic downturn attributable to the closing of Griffis Air Force base, the City experienced a population decline of greater than 25% from 44,350 in 1990 to 32,916 in

2015 (U.S. Census Bureau). The City's population has remained around 33,000 since 2000, while state and national populations have experienced growth averaging from 2% - 12%. The average age of the residents in Oneida County is older than that of the State, however the neighborhoods in the immediate vicinity of the 701 Lawrence Street are dominated by young families. Specifically, census data indicates that 59% of the population in Block Group 2, Census Tract 219, in the immediate vicinity of the 701 Lawrence Street site, is below the age of 35, as compared to 43% of the population in the County and 46% in the State, respectively. Neighborhoods in the vicinity of the 701 Lawrence Street site are often the only ones affordable to young, lower income families. Without investments in brownfield clean-up, infrastructure, and community development projects, poverty and disinvestment will continue to concentrate in neighborhoods like this.

The high proportion of brownfield properties in the City of Rome has led to higher property vacancy and underutilization rates, which have resulted in a reduced tax base and reduced property values because of perceived and actual environmental issues. As such, there is little interest shown by developers to purchase Brownfield sites in the City of Rome because of the existing environmental constraints and the associated increased costs for the cleanup and redevelopment of these properties. The cost to the City to foreclose on several of these tax delinquent, abandoned Brownfield sites, in particular the 701 Lawrence Street site, has greatly affected the City's ability to fund cleanup efforts.

The purpose of this EPA Brownfields Cleanup grant is to offset the costs associated with remediating a strategic redevelopment site in the City so that it can be repurposed and put back on the tax roll. As a new mixed-use commercial and residential development, the cleanup of the 701 Lawrence Street site would stimulate redevelopment activity along the Erie Boulevard corridor, providing diversity in housing stock and contributing to a healthy environment and quality of life for residents.

2.a.ii. Threats to Sensitive Populations (9 points)

(1) Health or Welfare (3 points)

As previously noted, the 701 Lawrence Street Site is located in Block Group 2, Census Tract 219 in Oneida County, NY. 22% of the population in Block 2 are comprised of minorities, which is 5% higher than that of Census Tract 219 (which includes Block 2), and twice as high as the City of Rome overall. Furthermore, 40% of the residents in Block 2 are living below the poverty level, and the median home value of Block 2 residents is only \$35,900, as compared to the \$53,220 median home value for the remaining residents in Census Tract 219, and \$90,500 for the City of Rome overall. Furthermore, the neighborhood that is located immediately adjacent to the 701 Lawrence Street site is characterized by the presence of several derelict structures and vacant homes. Specifically, nearly 20% of the homes in Block 2 are vacant. According to police records, 13% of the calls received for the Block 2 area were for burglary or drug-rated crimes. Therefore, the significantly lower quality of life that is being experienced by Block 2 residents as compared to the rest of Census Tract 219 and the City of Rome overall is largely attributable to the numerous Brownfield sites that exist in Census Tract 219, one of the more notable of which is the 701 Lawrence Street site.

(2) Greater Than Normal Incidence of Disease and Adverse Health Conditions (3 points)

In an effort to evaluate the health impacts of the 701 Lawrence Street site on the target community, surveys were mailed out and then hand delivered to the residents in Census Tract 219. However, due to a lack of participation from the target community residents, there is no data available for disease and adverse health conditions for this particular Census Tract, only

county-wide data. Specifically, data from the U.S. Center for Disease Control and Prevention (CDC) indicates that Oneida County ranks in the least favorable quartile when compared to surrounding counties for a number of indicators, including the number of older adults with asthma and depression, and residents living near highways. With an increasingly aging population, it is the City's goal to create a safe and secure pedestrian environment with access to goods and services to help older adults remain active and engaged in the community.

In addition to the above, the Oneida County Health Department developed a Community Health Assessment (CHA; 2013-2017) that identifies key health needs and issues in an effort to develop and implement policies to improve the overall health of the County's communities. The County conducted extensive outreach and participation efforts with local health care providers, educators and practitioners to identify the top issues facing the health and wellbeing of the community. Participants consistently emphasized economic development as the prime challenge, with a specific focus on lack of employment resulting in economic instability and social insecurity. Even though these are not primary health factors, job security and economic well-being contribute to health issues and therefore are secondary factors. Therefore, each City Brownfield site that is underutilized and not contributing to a healthy economy, including the 701 Lawrence Street site, becomes part of the reason for health concerns.

(3) Economically Impoverished/Disproportionately Impacted Populations (3 points)

The median household income for the residents in Block Group 2, Census Tract 219, in the immediate vicinity of the 701 Lawrence Street site is less than 50% of the State median. At the same time, the poverty rate in the Census Tract is greater than double that of the State average at 40.4% and 15.7%, respectively. Furthermore, the residents in Block Group 2, Census Tract 219 are unable to secure full-time employment despite a rebounding macro-economy in the City of Rome. Therefore, the low unemployment rate of 4.3% associated with Block Group 2 is misleading, as the residents are forced to settle for low paying jobs which translates to a higher than average poverty rate. Consequently, the property taxes paid by the property owners in Block 2, Census Tract 219 are significantly lower than for other areas of the City, and this factor results in a disproportionate economic burden on the City to provide fire and police protection services for these residents as compared to other areas of the City. As a result, the City does not have extraneous funds to utilize for site cleanup activities.

The 701 Lawrence St. is located within a NYSDEC-mapped "Potential Environmental Justice Area". As previously noted, 40.4% of the residents in Block 2 are living below the poverty level and 22.4% are minorities. Additionally, soil contaminated with lead and other pollutants, such as petroleum, pose risks, particularly for refugees, who often grow their own food using traditional farming practices without knowledge of site-specific soil conditions in their new communities. The City of Rome has welcomed over 250 Burmese refugees since 2008. Therefore, the City must continue to remediate contaminated Brownfield sites to better accommodate sensitive and at-risk populations whose livelihoods depend on the land.

2.b. Community Engagement (8 points)

2.b.i. Community Involvement (5 points)

The City of Rome has developed strong partnerships with many community organizations which will continue to play a role in the implementation of the final phase of the Downtown Rome BOA just as they have since 2007 when the BOA planning process began. They are as follows:

Partner Name	Point of contact (name, Email & phone)	Project Role
DePaul Properties, Inc.	Gillian Conde, Tel: (585) 426-8000; Email: depaulproperties@depaul.org	Participate in the reuse/planning process for the project site
Human Technologies	Timothy J. Giarrusso, Tel: (315) 724-9891; website: www.htcorp.net	Allocate resources to the BOA Steering Committee membership
Mohawk Valley EDGE	Shawna Papale, Tel: (315) 338-0393; Email: info@mvedge.org	Facilitate public engagement via community visioning workshops
Oneida County Health Dept.	Phyllis Ellis, Tel: (315) 798-6400; Email: publichealth@ocgov.net	Stakeholder in the City's plans for site reuse and revitalization
Oneida Co. Soil & Water Conserv.	Kevin L. Lewis, Tel: (315) 736-3334	Provide assistance with GIS mapping in support of cleanup
Rome Chamber of Commerce	William Guglielmo, Tel: (315) 337-1700; Email: info@RomeChamber.com	Publicize/host reuse planning meetings/roundtable discussions

2.b.ii. Incorporating Community Input (3 points)

To ensure that community members have a variety of forums and opportunities for participation, a Community Involvement Plan (CIP) was developed. The CIP is a guide to involving the community in the planning process which is intended to be flexible as the process unfolds. The community outreach process adopted for the Downtown Rome BOA will be integrated into the EPA cleanup grant for the 701 Lawrence Street site.

A variety of forums have been developed to engage residents and the general public regarding the final phase (Step 3) of the Downtown Rome BOA study, which involves the implementation of Brownfield cleanup and redevelopment activities. Specifically, public workshops and meetings that are hands-on and interactive allow the BOA Steering Committee to educate the community regarding the purpose and potential benefits of the cleanup and redevelopment of the 701 Lawrence Street site. Due to varying levels of planning expertise, socioeconomic backgrounds, and interests amongst the City's population, public workshops will continue to be held in a range of locations, such as the Rome Community Center, schools, and City Hall to accommodate as many community members as possible. The City will also host public hearings consistent with open meetings laws. To ensure that members of the public have accurate and up-to-date information, the City is developing a project website for the final phase of the Downtown Rome BOA that will provide the status of the cleanup activities at the 701 Lawrence Street site. In addition, the City will utilize its Facebook page and Twitter account to inform the public of the status of the cleanup activities at the 701 Lawrence Street site, and also provide a means by which to interact with the City on the progress of the project in real time.

3. Task Descriptions, Cost Estimates, and Measuring Progress (35 points)

3.a. Proposed Cleanup Plan (8 points)

As summarized in the NYSDEC-approved Remedial Alternatives Report dated May 2015 prepared by B&L for the 701 Lawrence Street site, which is included as Attachment D, the following three remedial alternatives were evaluated: 1) No Action; 2) Placement of a soil cap for exposure reduction and development of institutional controls; and 3) Soil excavation with off-site disposal. Each remedial alternative was evaluated against the NYSDEC ERP program criteria, including: Overall Protection of Public Health and the Environment; Compliance with Standards, Criteria, and Guidance (SCGs); Long-Term Effectiveness and Permanence; Reduction of Toxicity, Mobility or Volume; Short-term impact and effectiveness;

Implementability; Cost effectiveness; Land use; Community acceptance; Green Sustainable Remediation, and reasonably foreseeable changing climate conditions.

In their Record of Decision (ROD) dated February 2017, the NYSDEC selected the installation of a two-foot thick soil cover layer with institutional controls as the remedy for the site. Specifically, the ROD required that the following institutional controls be implemented at the site: 1) Installation and maintenance of a soil cover system to prevent human exposure to remaining contaminated soil/fill remaining at the site; 2) Execution and recording of an Environmental Easement to restrict land use and prevent future exposure to any contamination remaining at the site; 3) Development and implementation of a Site Management Plan; and 4) Periodic certification of the institutional and engineering controls listed above.

3.b. Description of Tasks and Activities (12 points)

The City of Rome will retain the services of Qualified Environmental Professional (QEP) utilizing the federal procurement process to assist in the performance of the following tasks:

Task 1: Programmatic activities including EPA quarterly and annual reporting, ACRES reporting, coordination with the selected engineering firm, attendance at the national EPA Brownfield conference, and preparation of payment drawdown requests. (\$3,000)

Task 2: Community outreach, education and citizen participation activities. (\$2,000)

Task 3: Cleanup planning including the preparation of a Cleanup Decision Memo, Health & Safety Plan, and Technical Specifications and Contract Bid documents. (\$5,000)

Task 4: Construction of the Soil Cap and preparation of as-built drawings and final engineering report (\$230,000). A detailed breakdown of the subtasks and associated costs for Task 4 are presented below in the next section. The City of Rome will provide the required 20% cost share either in cash or with the use of in-kind services provided by the City of Rome Department of Public Works.

The City of Rome entered the 701 Lawrence Street site in the ERP which is administered by the NYSDEC, and received approval of the Remedial Investigation and Remedial Alternatives Reports for the 701 Lawrence Street site. As such, the City will continue to coordinate with the NYSDEC throughout the cleanup process.

3.c. Cost Estimates and Outputs (10 points)

Budget Categories (Programmatic Costs Only)	Task 1	Task 2	Task 3	Task 4	Total
Personnel	\$0	\$0	\$0	\$0	\$0
Fringe Benefits	\$0	\$0	\$0	\$0	\$0
Travel	\$1,500	\$0	\$0	\$0	\$1,500
Equipment	\$0	\$0	\$0	\$0	\$0
Supplies	\$0	\$0	\$0	\$0	\$0
Contractual	\$1,500	\$2,000	\$5,000	\$190,000	\$198,500
Total Federal Funding	\$3,000	\$2,000	\$5,000	\$190,000	\$200,000
Cost Share	\$0	\$0	\$0	\$40,000	\$40,000
Total Budget	\$3,000	\$2,000	\$5,000	\$230,000	\$240,000

None of the EPA Brownfield Cleanup funds will be spent on City personnel salaries or fringe benefits. The City will use 95% the EPA Brownfields Cleanup Grant funds for the performance of site cleanup activities which consist of the following:

- Installation of a Demarcation Layer (snow fencing): 8,972 square yards (SY) at a cost of \$2.25/SY. Estimated Cost = \$20,187.
- Placement/Compaction of an 18-inch thick layer of clean imported back fill: 6,000 cubic yards (CY) at a cost of \$24/CY. Estimated Cost = \$144,000.
- Placement of a six-inch thick layer of topsoil, seeding, and stabilization: 8,966 SY at a cost of \$5.50/SY. Estimated Cost = \$49,313.
- Field Inspection and Community Air Monitoring during Soil Cap Installation: Estimated 2-week duration by Consultant. Estimated Cost is \$7,500.
- Preparation of As-Built Drawings by Surveyor: Estimated Cost is \$6,500.
- Preparation of Final Cleanup Report: Estimated Cost is \$2,500.

The physical construction and installation of the soil cap at the 1.85 acre site is a fairly straightforward task that is estimated to take 4 to 6 weeks to complete. Therefore, the entire cleanup project from start to finish can be easily accomplished during the 3 year grant period. The specific output of this project will be the successful installation of the two-foot thick soil cap at the 701 Lawrence Street site in accordance with NYSDEC regulations, and the subsequent issuance of a Certificate of Completion (COC) by the NYSDEC which releases the site from the ERP and makes it immediately available for redevelopment.

3.d. Measuring Environmental Results (5 points)

The City will be able to easily track the progress and schedule of the cleanup activities at the 701 Lawrence Street site, as the construction sequence that will be followed in the installation of the soil cap is well defined and can be visually monitored. The issuance of a COC by the NYSDEC will signify the completion of the cleanup phase of the project. Similarly, the future redevelopment of the 701 Lawrence Street site as a multi-use facility to potentially include kayak and rowing storage spaces, along with a small commercial/residential mixed use complex can also be easily tracked by the City. Specifically, a developer has already expressed his interest to City officials to purchase and develop the site for the aforementioned purpose, and therefore once the cleanup activities have been completed the site development phase can begin. The developer will need to submit conceptual and final site design plans to the City Planning Board for review and approval, and therefore it will be easy for the City to monitor and track the progress and status of site development activities. The issuance of a Certificate of Occupancy from the City to the developer will memorialize the completion of site development activities.

4. Programmatic Capability and Past Performance (15 points)

4.a. Programmatic Capability (9 points)

4.a.i. Organizational Structure (5 points)

The City of Rome Department of Community and Economic Development maintains a staff that is able to ensure the timely and successful expenditure of funds and completion of the administrative and financial requirements associated with the project and grant. The City will retain the services of a Qualified Environmental Professional (QEP) to ensure the successful completion of the technical aspects of the cleanup project. Key City of Rome staff that are participating on this project include:

- **Project Manager - Diana Samuels, Planning Assistant:** Ms. Samuels has been with the City of Rome for 15 years, four of which have been in the Department of Community and Economic Development. Ms. Samuels is currently overseeing two other EPA Cleanup Grants

located within the City and will be the Project Manager on this grant. She was the project manager for the Environmental Restoration Program (ERP) grant for this site as well.

- **Matt Andrews, Deputy Director:** Mr. Andrews has been with the Community & Economic Development Department 10 years, and he recently assumed the role of Deputy Director. Mr. Andrews oversees the City's two Brownfield Opportunity Area projects and serves as a liaison with the City and community for planning efforts and CDBG funding.
- **Dan Carpenter, Project Manager:** Mr. Carpenter recently joined the Community & Economic Development Department. He previously served as a Building Inspector in the Codes Enforcement Department. Currently he is assisting with Commercial Facade Projects, and will also be the Project Manager for various ongoing grants in the City.
- **Sarah Lokker, Administrative Assistant:** Ms. Lokker recently joined the Community and Economic Development Department. She will be assisting with MWBE compliance and will also be responsible for vendor payments.
- **Butch Conover, Commissioner of Public Works:** Mr. Conover, who has been the Commission of Public Works for approximately 3 years, will allocate Department of Public Works resources for the cleanup project.

4.a.ii. Acquiring Additional Resources (4 points)

The professional employees involved in the City's Department of Community and Economic Development, as well as the involvement of long-time partnering contracted professionals, demonstrates the capacity of the City to retain project leadership should employee turnover occur. However, the City will use its standard employee recruiting system and existing Personnel Staff and policies to recruit qualified staff quickly if a position is vacated.

4.b. Past Performance and Accomplishments (6 points)

4.b.i. Currently Has or Previously Received an EPA Brownfields Grant (6 points)

(1) Accomplishments (3 points)

1) 1996 EPA Brownfields Pilot Grant - \$200,000: In 1998, the City of Rome completed the first of its EPA grant projects, which began 14 years of increased partnerships, successes, and millions of dollars in leveraged funding for the East Rome Business Park. The cleanup of the 17-acre former General Cable site was hailed as one of EPA Region 2's demonstration projects, and continues to be one of Rome's greatest success stories in brownfield redevelopment.

2) Agreement No. BF97285504-0 – EPA Brownfield Assessment Grant: This was a \$200,000 EPA Brownfields Assessment Grant that started in September 2004 and ended in December 2010. All reports were submitted in a timely manner.

3) Agreement No. BF97204512-2 – EPA Brownfield Cleanup Grant: The City received a \$200,000 EPA Brownfields Cleanup Grant in 2011 for the performance of PCB remediation activities at the 1333 East Dominick Street site. The EPA grant expired on September 30, 2017.

4) Agreement No. BF96271816-0 – EPA Brownfield Cleanup Grant: The City received a \$200,000 EPA Brownfields Cleanup grant in 2016 for the performance of petroleum remediation activities at the Former Rome Turney site. The Grant will expire on September 30, 2019.

5.d.i.2. Compliance with Grant Requirements (3 points)

The City of Rome has fully complied with all the EPA-mandated requirements in the management and execution of their four EPA Brownfields grants, including the timely submittal of quarterly and annual reports to the EPA and the input of site specific data into the ACRES database. The site investigation and cleanup work that has been accomplished by the City of Rome with the use of EPA Brownfields grant funding is described above in Section 5.d.i.1.

Attachment A

**Request for Petroleum Site Eligibility
Letter to the NYSDEC dated
January 10, 2019**

Jacqueline M. Izzo
Mayor



Matthew Andrews
Deputy Director of Community
& Economic Development

DEPARTMENT OF COMMUNITY AND ECONOMIC DEVELOPMENT

Rome City Hall, 198 N. Washington Street, Rome, New York 13440-5815
Telephone: (315) 339-7643 Fax: (315) 838-1167

January 10, 2019

Theodore Bennett, Director
Bureau of Program Management
Division of Environmental Remediation
NYS Dept. of Environmental Conservation
625 Broadway
Albany, New York 12233

Re: Petroleum Site Eligibility Determination
FY19 USEPA Brownfields Cleanup Grant Proposal
701 Lawrence Street, Rome, NY
Site No. E633063

Dear Mr. Bennett:

The City of Rome intends to submit a Brownfields Cleanup Grant proposal to the U.S. Environmental Protection Agency (USEPA) on January 31, 2019 for the award of \$200,000 in funding for the cleanup of the Environmental Restoration Program (ERP) Brownfield site located at 701 Lawrence Street (Operable Unit Number 01) in the City of Rome (Site No. E633063). In accordance with the USEPA FY19 Guidelines for Brownfields Cleanup Grants, the City of Rome must submit a written request to the Department to determine if the 701 Lawrence Street site (Operable Unit No. 01) is deemed to be eligible for USEPA Brownfields Cleanup Grant funding based on the following site specific information:

Current and Immediate Past Owners: The City of Rome is the sole owner of the property. Mr. Garrett Russitano was the immediate previous owner.

Acquisition of Site: The site was acquired by the City of Rome on September 22, 2006 via a tax foreclosure.

No Responsible Party for the Site: The current owner did not dispense or dispose of petroleum or petroleum product, or exacerbate the existing petroleum contamination at the site. Additionally, the immediate past owner did not (i) dispense or dispose of petroleum or exacerbate the existing petroleum contamination at the site. (ii) Neither the current nor immediate past owner owned the site when any dispensing or disposal of petroleum (by others) took place. (iii) The City of Rome, as the current owner, has

taken reasonable steps with regard to the contamination at the site, including securing the site and performing extensive investigative studies.

Cleaned Up by a Person Not Potentially Liable: The on-site petroleum spills occurred during the period of 1984 through 1990. The City of Rome did not acquire the site until September, 2006. The applicant, the City of Rome, did not dispense or dispose of petroleum or petroleum product or exacerbate the existing petroleum contamination at the site. The applicant has taken reasonable steps with regards to the contamination at the site by securing the site, having it remain unused to limit exposure to the public, and performing extensive environmental investigations.

Judgements, Orders, or Third-Party Suits: No responsible party has been identified for the site through, either:

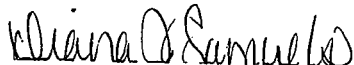
- i) A judgement rendered in a court of law or an administrative order that would require any person to assess, investigate, or clean up the site: or
- ii) An enforcement action by federal or state authorities against any party that would require any person to assess, investigate, or clean up the site; or
- iii) A citizen suit, contribution action, or other third-party claim brought against the current or immediate past owner, that would, if successful, require the assessment, investigation or cleanup of the site.

Subject to RCRA: The site is not subject to any order under section 9003(h) of the Solid Waste Disposal Act of the Resources Conservation and recovery Act (RCRA).

Financial Viability of Responsible Parties: The on-site petroleum spills occurred during the period of 1984 through 1990, and the City of Rome acquired the site on September 22, 2006 via tax foreclosure. The immediate past owner purchased the property in December, 2002. Since the spill predates both purchases, neither the current nor the immediate past owner is responsible for the contamination of the site.

Should you have any questions regarding the information presented herein, or wish to discuss further, please feel free to contact me at dsamuels@romecitygov.com or by phone at 315-339-7646.

Very Truly Yours,



Diana Samuels – Planning Assistant

Attachment B

Threshold Criteria for EPA Brownfields Cleanup Grants

III.B Threshold Criteria for Cleanup Grants

III.B.1 Applicant Eligibility

The City of Rome is an eligible entity. It is a unit of local government as defined under 40 CFR Part 31.

III.B.2 Previously Awarded Cleanup Grants

The 701 Lawrence Street site in the City of Rome has never received funding from a previously awarded EPA Brownfields Cleanup Grant.

III.B.3 Site Ownership

The City of Rome is the sole owner of the property. The site was acquired on September 22, 2006 via a tax foreclosure. Mr. Garrett Russitano was the immediate previous owner.

III.B.4 Basic Site Information

- (a) The site is known as the 701 Lawrence Street Site.
- (b) The site address is 701 Lawrence Street, Rome, NY, 13440. The tax ID is 242.082-0001-031.
- (c) The City of Rome is the current owner.
- (d) Not applicable.

III.B.5 Status and History of Contamination at the Site

- (a) This site is contaminated by petroleum.
- (b) Based on information provided by Buck Engineering in their December 2002 limited Phase I Environmental Site Assessment (ESA) Report, the site has historically been utilized for the purpose of petroleum bulk storage beginning circa 1936 and lasting until May 1990. The City of Rome directories list Socony Vacuum Oil as the occupant of the property from 1936 until 1956, which the Assessor's records list Socony Mobil Oil Co., as the owner of seven (7) petroleum bulk storage tanks that ranged in capacity from 16,000 gallons to 1.15 million gallons. Gasoline and fuel oil products were stored in the tanks, and the tanks were decommissioned in May 1990. In addition to Socony Vacuum Oil Co., Inc. and Socony Mobil Oil Co., past owners of the property include Ralph Nolan, the Nolan Corporation, Inland fuels, Inc., and the City of Rome. As of December 2002, the property was owned by Mr. Garrett Russitano and used for vehicle and scrap storage. Currently the site is not being used.
- (c) Soils and groundwater at the site have been contaminated by petroleum.
- (d) Several documented spills have been recorded at the 701 Lawrence Street location, and significant subsurface contamination has been documented, including the detection of

volatile organic constituents and petroleum hydrocarbons in groundwater. Specifically, four (4) NYSDEC spill numbers (8401531, 851569, 876432, and 901000) were assigned to the site in 1984, 1985, 1987, and 1990, respectively, as the result of poor housekeeping practices. These spill numbers were subsequently classified by the Department as “closed, cleanup meets standards.” Spill number 1906626, which was assigned to the site on October 3, 1989 due to the discovery of significant subsurface contamination, resulted in a NYSDEC spill contractor installing six (6) groundwater monitoring wells at the site. Groundwater sampling results for the period of March 1992 through July 1995 reveal that contaminants representative of lubrication oil, gasoline, kerosene, and fuel oil were detected in the on-site groundwater during this time period. The 1989 spill number was subsequently closed by the Department in 1997 with the notation “closed – does not meet State standards.” Monitoring wells installed as part of the site assessment were reportedly abandoned in 1997.

III.B.6 Brownfields Site Definition

- (a) The site is not listed, nor is it proposed for listing on the National Priorities List.
- (b) The site is not subject to Federal unilateral administrative orders, court orders, administrative orders on consent, or judicial consent decrees issued to or entered into by parties under CERCLA.
- (c) The site is not subject to the jurisdiction, custody, or control of the U.S. government.

III.B.7 Environmental Assessment Required for Cleanup Proposals

The site is currently enrolled in the New York State (NYS) Environmental Restoration Program (ERP) which is administered by the New York State Department of Environmental Conservation (NYSDEC). A Remedial Investigation Report (RIR) dated June 2014, which conforms to the ASTM Phase II Environmental Site Assessment standards, was prepared by Barton & Loguidice, D.P.C., (B&L). The RIR was approved by the NYSDEC on December 30, 2014. B&L subsequently prepared an Alternatives Analysis Report (AAR) dated May 2015, which was also approved by the NYSDEC. The Department issued a Proposed Remedial Action Plan (PRAP) for the site in December 2016, and a Record of Decision (ROD) in February 2017.

III.B.8 Enforcement or Other Actions

There are no known ongoing or anticipated environmental enforcement or other actions related to the site.

III.B.9 Sites Requiring a Property-Specific Determination

The site does not need a property-specific determination

III.B.10 Threshold Criteria Related to CERCLA/Petroleum Liability Eligibility

III.B.10 (b) Property Ownership Eligibility – Petroleum Sites

III.B.10 (b) (i) Information Required for a Petroleum Site Eligibility Determination

III.B.10 (b) (i) (1) Current and Immediate Past Owners

The current owner is the City of Rome. The immediate past owner is Mr. Garrett Russitano.

III.B.10 (b) (i) (2) Acquisition of Site

The City of Rome acquired the site on September 22, 2006 via tax foreclosure.

III.B.10 (b) (i) (3) No Responsible Party for the Site

The current owner did not dispense or dispose of petroleum or petroleum product, or exacerbate the existing petroleum contamination at the site. Additionally, the immediate past owner did not (i) dispense or dispose of petroleum or exacerbate the existing petroleum contamination at the site. (ii) Neither the current nor immediate past owner owned the site when any dispensing or disposal of petroleum (by others) took place. (iii) The City of Rome, as the current owner, has taken reasonable steps with regard to the contamination at the site, including securing the site and performing extensive investigative studies.

III.B.10 (b) (i) (4) Cleaned Up by a Person Not Potentially Liable

The on-site petroleum spills occurred during the period of 1984 through 1990. The City of Rome did not acquire the site until September, 2006. The applicant, the City of Rome, did not dispense or dispose of petroleum or petroleum product or exacerbate the existing petroleum contamination at the site. The applicant has taken reasonable steps with regards to the contamination at the site by securing the site, having it remain unused to limit exposure to the public, and performing extensive environmental investigations.

III.B.10 (b) (i) (5) Judgments, Orders, or Third Party Suits

No responsible party has been identified for the site through, either:

- i) A judgement rendered in a court of law or an administrative order that would require any person to assess, investigate, or clean up the site; or
- ii) An enforcement action by federal or state authorities against any party that would require any person to assess, investigate, or clean up the site; or

iii) A citizen suit, contribution action, or other third-party claim brought against the current or immediate past owner, that would, if successful, require the assessment, investigation or cleanup of the site.

III.B.10 (b) (i) (6) Subject to RCRA

The site is not subject to any order under section 9003(h) of the Solid Waste Disposal Act of the Resources Conservation and recovery Act (RCRA).

III.B.10 (b) (i) (7) Financial Viability of Responsible Parties

The on-site petroleum spills occurred during the period of 1984 through 1990, and the City of Rome acquired the site on September 22, 2006 via tax foreclosure. The immediate past owner purchased the property in December, 2002. Since the spill predates both purchases, neither the current nor the immediate past owner is responsible for the contamination of the site.

III.B.11 Cleanup Authority and Oversight Structure

III.B.11.a Cleanup Oversight

The site is currently enrolled in the Environmental Restoration Program which is administered by the NYSDEC. The regulatory oversight will remain the responsibility of the NYSDEC Division of Environmental Remediation (DER) staff. The City of Rome, with B&L as their representative, will implement the NYSDEC-approved remedy for the site in order to achieve Restricted Residential Use Soil Cleanup Objectives (SCOs) in accordance with the provisions of 6 NYCRR Part 375.

B&L, acting as the City's representative, prepared both the June 2014 Remedial Investigation Report and the May 2015 Alternatives Analysis Report, both of which were approved by the NYSDEC. Therefore, B&L is knowledgeable and fully qualified to act as the City's representative.

III.B.11.b Access to Adjacent Properties

The 1.85 acre parcel is bordered to the north by Luquer Street, with a vacant lot and an automotive repair facility located on the opposite side of the street. The eastern portion of the site is bordered by remnants of Canal Street and railroad tracks, while the recently constructed Canalway Trail forms the southern site boundary. The western side is bound by Lawrence Street, which dead ends before the Erie Canal. There is adequate roadway access to the site, and therefore the City of Rome does not anticipate any issue with access.

III.B.12 Community Notification

III.B.12.a Draft Analysis of Brownfield Cleanup Alternatives

B&L prepared an Alternatives Analysis Report (AAR) for the site dated May 2015, which satisfies the EPA requirements for the preparation of a Draft Analysis of Brownfield Cleanup Alternatives. Following their review and approval of the AAR, the NYSDEC issued a Proposed

Remedial Action Plan (PRAP) for the site in December 2016. The NYSDEC held a public information meeting on January 19, 2017 to present the preferred remedy for the site, and continued to accept public comments on the PRAP until February 7, 2017. The NYSDEC then issued a Record of Decision (ROD) for the 701 Lawrence Street in February 2017.

III.B.12.b Community Notification Ad

A notice of a public meeting was advertised on January 9, 2019. The ad also directed the public to the city website to review the draft application and NYSDEC-approved Alternatives Analysis Report. A copy of the ad is enclosed as Attachment C.

III.B.12.c Public Meeting

The required public meeting was held as advertised on January 17, 2019 at 12:00 noon in the Council Chambers at Rome City Hall. The draft application, Alternatives Analysis Report, Proposed Remedial Action Plan, and Record of Decision were available for review at that time and the public was given the opportunity for comment. No members of the public attended this meeting.

III.B.12.d Submission of Community Notification Documents

Please find in Attachment C a copy of the public notice that was issued by the City of Rome advertising the public meeting. No one from the public attended the public meeting, and therefore there were no comments to report from that meeting. Additionally, there were no public comments received from the posting on the city website. Therefore, there are no public comments to report or to respond to.

Please find in Attachment D the NYSDEC-approved Alternatives Analysis Report prepared by B&L for the 701 Lawrence Street Site, in Attachment E the Proposed Remedial Action Plan prepared by the NYSDEC for the 701 Lawrence Street Site, and in Attachment F the Record of Decision issued by the NYSDEC for the 701 Lawrence Street Site..

III.B.13 Statutory Cost Share

III.B.13.a Meet Required Cost Share

The City of Rome will provide the 20% cost share in cash or other in-kind contributions through force accounts.

III.B.13.b Hardship Waiver Request

The City of Rome is not seeking a hardship waiver of the 20% cost share.

Attachment C

Documentation of Community Notification

State of New York } ss: County of Oneida }

LEGAL NOTICE

Notice is hereby given that the City of Rome is planning to apply for a United States Environmental Protection Agency (USEPA) Brownfield Cleanup Grant on or before January 31, 2019 for 701 Lawrence Street, Rome, NY. The draft application, including an Analysis of Brownfield Cleanup Alternatives (ABCA) will be available for review and comment at a public meeting on

January 17, 2019 at 12:00 pm in the Common Council Chambers, 2nd floor at Rome City Hall 198 N. Washington Street, Rome, NY 13440.

The draft application and ABCA will also be available for review and comment at City Hall or on the city's website: <http://romenewyork.com>

The public may send written comments to Matthew Andrews to the above address or via email to: mandrews@romecitygov.com until January 30, 2019.

1/9-1ti

I, Michele M. Taylor, being sworn, says she is, and during the time hereinafter mentioned, was Legal Advertising Representative of the DAILY SENTINEL, a newspaper printed and published in the County of Oneida, aforesaid; and that the annexed printed Notice was inserted and published in said Newspaper once/commencing

on the 9th day of January, 20 19

to wit: January 9th

January 9th, 20 19

Michele M. Taylor

Sworn to before me this 14th day of January, 20 19

Eileen M. Pierson Notary Public

EILEEN M. PIERSON
Notary Public - State of New York
No. #01PI6360556
Qualified in Oneida County
My Commission Expires June 19, 2021

Thursday, January 17, 2019

Public Meeting

701 Lawrence Street Cleanup Grant Application

Sign-in Sheet

1. DAN CARPENTER - CITY OF ROME PROJECT MANAGER
2. STEPHEN B. LE FEVRE - BARTON AND LOGUIDICE
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.

Attachment D

**Final Alternatives Analysis Report (AAR)
for the 701 Lawrence Street Site
Prepared by Barton & Loguidice, D.P.C.,
Dated May 2015**

**701 Lawrence Street
Environmental Restoration Project**

**City of Rome
Oneida County, New York**

Alternatives Analysis Report (AAR)

**State Assistance Contract No. C303404
New York State Site No. E633058**

May 2015



701 Lawrence Street
Environmental Restoration Project

City of Rome

Alternatives Analysis Report
New York State Assistance Contract No. C303404
New York State Site No. E633058

May 2015

Prepared For:
City of Rome
198 North Washington Street
Rome, New York 13440

Prepared By:
Barton & Loguidice, D.P.C.
Engineers • Environmental Scientists • Planners • Landscape Architects
290 Elwood Davis Road
Box 3107
Syracuse, New York 13220

I, the undersigned engineer, certify that I am currently a NYS registered professional engineer. This Alternatives Analysis Report was prepared in accordance with all applicable statutes and regulations, and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10). All activities were performed in full accordance with the DER-approved work plan and any DER-approved modifications.



Scott D. Nostrand, P.E.

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Appendix A – Remedial Alternative Cost Estimates

Appendix B – Part 375 Land Use Considerations

Executive Summary

The City of Rome conducted a remedial investigation (RI) in accordance with the New York State Department of Environmental Conservation (NYSDEC) Environmental Restoration Program (ERP) at its property located at 701 Lawrence Street (Site) in the City of Rome, Oneida County, New York. The 1.85 acre parcel, which is located on the north side of the New York State Barge Canal, was formerly used for petroleum bulk storage circa 1936 and lasting until May 1990. The investigation and related interim remedial measure (IRM) activities were conducted under the oversight of Barton & Loguidice, D.P.C. (B&L), the NYSDEC, and the New York State Department of Health (NYSDOH). The results of the investigation are summarized in the NYSDEC and NYSDOH approved June 2014 Remedial Investigation (RI) Report.

The three IRMs performed at the site are described in detail in the IRM Construction Completion Report prepared by B&L dated March 2012. The reader is referred to this document for an in-depth discussion of the completed IRM activities. Briefly, the IRM activities completed at 701 Lawrence Street included the following:

- Asbestos abatement;
- Drum and waste characterization and removal;
- Building demolition;
- Installation of fencing to secure the Site;
- Removal and closure of three (3) underground storage tanks (USTs), two (2) of which were located on-site. The third UST, located on the adjacent NYS Canal Corporation property, was found to be associated with a stormwater treatment system that was also located on the adjacent NYS Canal Corporation property;
- Removal and closure of the aforementioned stormwater treatment system that was apparently used to separate oil from stormwater draining from the 701 Lawrence Street site;
- Removal of underground petroleum transmission pipelines, portions of which were located on the adjacent NYS Canal Corporation property;
- Off-site disposal of 730.23 tons of non-hazardous contaminated soil (150 tons of which were excavated from the adjacent NYS Canal Corporation property);
- Off-site disposal of approximately 7,850 gallons of petroleum contaminated fluids (5,000 gallons of which were derived from the stormwater treatment system and UST located on the adjacent NYS Canal Corporation property).

Site investigation activities, summarized in the June 2014 RI Report, included the collection of 57 subsurface soil samples from the monitoring well and soil boring installations, 9 stormwater treatment system and UST soil clearance samples, 1 round of groundwater samples from the 9 monitoring wells, 9 surface soil samples, and 5 floor drain sediment samples.

Clearance soil sampling associated with the excavation and removal of the aforementioned USTs and former stormwater treatment system revealed that the majority of samples collected had no reportable concentrations of volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), total metals, and PCBs that exceeded their respective Part 375 Soil Cleanup Objectives (SCOs) for the Protection of Groundwater. There were no SVOC and PCB concentrations which exceeded their respective SCOs. Acetone exhibited a slight exceedance of the respective SCO as noted below:

- 701LA-T3 Bottom - Acetone 81 ug/kg vs. Part 375 SCO Standard – 50 ug/kg

Also, total chromium exceeded its respective Part 375 SCO for Protection of Groundwater in three of the confirmatory soil samples submitted for analysis. However, the total chromium concentration exceedances were only slightly above the applicable standard as noted below:

- 701LA-T3 West – Chromium 22 ug/kg vs. Part 375 SCO Standard – 19 ug/kg
- 701LA-STV South – Chromium 20.2 ug/kg vs. Part 375 SCO Standard – 19 ug/kg
- 701LA-STV North – Chromium 19.1 ug/kg vs. Part 375 SCO Standard – 19 ug/kg

All Part 375 Protection of Groundwater SCO concentration exceedances occurred in the former stormwater treatment system / Tank T3 area. The reported total chromium concentrations for all other excavation confirmatory soil samples were below the applicable Part 375 SCO standard for Protection of Groundwater.

Site characterization activities determined the on-site and off-site extent of floor drain sediment, surface soil, subsurface soil, and residual groundwater contamination originating from the site. Specifically, several of the detected metals concentrations in the analyzed floor drain sediment samples exceeded the applicable Part 375 Restricted-Residential SCOs for arsenic, barium, cadmium, chromium, copper, lead, zinc, and total PCBs. However, the sediments were removed from the floor drains and properly disposed of off-site prior to the demolition of the building structure. There were no exceedances of Part 375 Restricted-Residential SCOs in the analyzed sediment and surface soil samples for VOCs or SVOCs, but tentatively identified compounds (TICs) for VOCs and SVOCs were reported for various surface soil samples.

With regards to the analyzed subsurface soil samples collected at soil boring and monitoring well locations, there were no reported exceedances of the applicable Restricted Residential SCOs for VOCs, SVOC, PCBs, or metals. However, total VOC and SVOC TICs were noted in a majority of the subsurface soil samples, and field observations collected with a photoionization detector (PID) recorded VOC readings in the range of 3.5 to 1,091 parts per million (ppm) in the on-site soil borings, and between 1.5 and 330 ppm in the off-site soil borings.

The groundwater sampling results exhibited several concentration exceedances of the metals parameters iron, manganese, and sodium as compared to the Part 5 Drinking Water Standards in both the on-site and off-site monitoring wells. Similar to the other media samples, the analyzed groundwater samples did not exhibit exceedances of the applicable SCOs for VOCs, SVOCs, or PCBs, but various VOC and SVOC TICs were detected at low concentrations in four of the nine analyzed groundwater samples. Specifically, a maximum concentration of 112.7 parts per billion (ppb) of VOC and SVOC TICs was reported for off-site monitoring well MW-7.

As noted above, TICs are reported in a majority of the analyzed surface soil, subsurface soil, and groundwater samples. Further review of the reported TICs indicate that the TICs primarily consist of hydrocarbons and polycyclic hydrocarbons (PAHs), both groups of which are associated with petroleum products. Based on the site's history as a bulk petroleum storage facility, it is probable that the reported TICs are indicative of residual, weathered subsurface petroleum contamination. Similarly, the PID readings and visual evidence of subsurface petroleum contamination observed on-site is likely related to historic petroleum contamination, rather than recent spill events of which there have been none recorded for the site.

The results of the environmental evaluation and qualitative risk assessment suggest that the residual contamination remaining on-site does not represent a significant risk to human health receptors or to the environment (including wildlife) under current conditions. Key considerations to the risk assessment include:

- The presence of a public water supply (there are no on or off-site private supply wells);
- Remaining site contaminants are vertically and horizontally defined.
- 730.23 tons of non-hazardous contaminated soil was removed from the site, 150 tons of which were from the adjacent NYS Canal Corporation property.
- Approximately 7,850 gallons of petroleum contaminated fluids were removed from the site, 5,000 gallons of which were derived from the stormwater treatment system and UST located on the adjacent NYS Canal Corporation property.

The results of the ecological evaluation and qualitative risk assessment suggest that the metals exceedances reported in all nine of the surface soil samples and three of the IRM soil clearance samples, in addition to the presence of VOC and SVOC TICs in a majority of the analyzed IRM soil clearance, surface soil, and subsurface soil samples, have the potential to pose a threat to human health receptors or impacts on the environment through direct contact (i.e., absorption), ingestion, or possible future site development activities (e.g., site construction) with the impacted surface and subsurface soils at the site.

Due to the fact that metals-contaminated surface soils are prevalent across the entire 1.85 acre site, and taking into account the areal extent and depth of the analyzed subsurface soil samples in which metals and VOC and SVOC TICs were detected, combined with the recorded PID readings and visual evidence of subsurface petroleum contamination observed in the completed soil borings and test pits, the entire property limits at the 701 Lawrence street site are considered by B&L to constitute area of concern (AOC-1). However, it is important to note that the Canal Corporation property is not considered to be a part of AOC-1. Specifically, based on their review of the soil and groundwater soil quality data collected by B&L at the off-site soil boring and monitoring well locations, the NYSDEC has determined that any petroleum-contaminated soils that exist on the Canal Corporation property do not represent a source of contamination, and therefore no future remediation is necessary on the Canal Corporation property. As such, the remedial alternatives presented herein do not account for any off-site contamination that may exist on the adjacent Canal Corporation property.

Three remedial alternatives, including the "No Further Action" alternative, were evaluated to address the remedial objectives for the site. One alternative was evaluated that would be fully

protective of human health and environment under existing and future hypothetical conditions. The option with the greatest cost-benefit appeal at a cost of approximately \$205,130 includes the placement of a two-foot thick layer of clean fill material over the entire property limits, coupled with institutional controls to address hypothetical future exposure scenarios. One additional alternative was evaluated that involved contaminant removal to 15 feet below the ground surface, however, this particular alternative is no more protective of human health and the environment than the installation of the two-foot thick layer of clean fill material across the entire site. The soil excavation option would cost approximately \$6,666,962.

A key factor in the analysis of possible remedial alternatives was to determine if the resulting benefit to potential human health exposures and impacts to the environment warranted additional capital expenditures.

The installation of a two-foot thick layer of clean fill material across the entire site, combined with the implementation of institutional controls, an environmental easement, and a Site Management Plan (Alternative 2), will be effective in protecting human health and the environment. This approach addresses all current and future hypothetical exposure scenarios.

1.0 Introduction

The 701 Lawrence Street site, which is located on the north side of the New York State Barge Canal (aka Erie Canal), was formerly used for petroleum bulk storage circa 1936 and lasting until May 1990. Gasoline and fuel oil products were primarily stored in aboveground storage tanks (ASTs) which were decommissioned in May 1990. Up until August 2009, the 1.85-acre parcel contained a single, one-story, open-sided 7,450 square foot building with a metal roof and metal siding that was located in the northwestern portion of the property. The subject parcel is bordered to the north by Luquer Street, with a vacant lot and an automotive repair facility located on the opposite side of the street. The eastern portion of the site is bordered by remnants of Canal Street and railroad tracks, while property owned by the NYS Canal Corporation forms the southern site boundary. The western side is bound by Lawrence Street, which dead ends before the Erie Canal. (The bridge that historically carried Lawrence Street across the canal has been removed; Lawrence Street continues on the south side of the Erie Canal). The site is enclosed on all sides by a chain-link fence topped with barbed wire. Following the completion of the initial site investigation activities, it was brought to B&L's attention that the southern property line is located approximately 30 feet to the north of the fence line. As a result, several test pits, soil borings, and monitoring wells were placed off-site on the adjacent NYS Canal Corporation property located along the bank of the Erie Canal. Additional site history and background detail is provided in the June 2014 RI Report.

Based upon our evaluation of the soil and groundwater data collected during the performance of the RI, B&L was able to define the vertical and horizontal limits of soil and groundwater contamination at the 1.85-acre parcel and adjacent NYS Canal Corporation property, and complete a contaminant fate and transport evaluation. A total of 33 test pits, 25 soil borings, and nine groundwater monitoring wells were installed at the site as part of the RI (refer to Figure 2). Three initial interim remedial measures (IRMs) were conducted as part of the RI to remove and properly dispose of the following items: three underground storage tanks (USTs), an off-site stormwater treatment system, underground petroleum transmission pipelines, 730.23 tons of non-hazardous contaminated soil, and approximately 7,850 gallons of petroleum contaminated fluids (refer to Figure 3). As a result of the aforementioned IRM activities, many of the formerly existing potential sources of contamination at the site have been eliminated, and the potential for future associated contaminant migration minimized.

The subsurface investigation revealed mixed fill consisting of gravel and asphalt debris with 0- to 3-feet of topsoil with increasing thickness toward the eastern portion of the site. The total depth of fill ranged approximately from 2- to 4-feet below ground surface throughout the site, before grading to a silt and clay, which appeared to extend from 1- to 14-ft below grade. The silt and clay unit was underlain by a sand and gravel unit. The uppermost water-bearing zone was typically encountered at a depth between 2.5 and 12.5 feet on the site. Bedrock was not encountered during the subsurface investigation.

The site contaminants of concern consist of metals-contaminated surface and subsurface soils, a single isolated occurrence of the VOC parameter acetone in one of the IRM soil clearance samples, the presence of VOC and SVOC TICs in a majority of the analyzed surface soil and

subsurface soil samples, and VOC and SVOC TICs in four (4) of the nine (9) analyzed groundwater quality samples.

As previously noted, the reported TICs consist primarily of hydrocarbons and polycyclic hydrocarbons (PAHs), both groups of which are associated with petroleum products. Based on the site's history as a bulk petroleum storage facility, it is probable that the reported TICs are indicative of residual, weathered subsurface petroleum contamination. Similarly, the PID readings and visual evidence of subsurface petroleum contamination observed on-site is likely related to historic petroleum contamination, rather than recent spill events of which there have been none recorded for the site.

The results of the groundwater investigation indicate that although there are no surface water bodies at the site, groundwater leaving the site and discharging to down gradient surface water bodies is a viable contaminant transport mechanism. However, since the groundwater does not appear to be significantly impacted, and groundwater contaminant transport is not expected to play a significant role, this transport mechanism does not appear to warrant further evaluation.

1.1 Purpose of Report

This Alternatives Analysis Report (AAR) presents an evaluation of the remedial alternatives to eliminate or mitigate threats to public health and the environment in order to support the selection of a preferred remedy. The alternatives are based upon the findings presented in the June 2014 RI Report. This AAR has been prepared in accordance with DER-10, 6 NYCRR Part 375, and the Environmental Restoration Program (ERP) Guidelines.

1.1.1 Report Organization

This report is organized into four major sections (including this introduction section), with appropriate subsections within each division. Tables and figures are located following the text, prior to the appendices in the back of the document.

Section 2.0 presents the remedial alternatives evaluation. Within this section, information is presented regarding remedial alternatives as compared to the DER-10 and ERP evaluation criteria. Section 3.0 outlines the cost-benefit analysis for each alternative. References cited are presented in Section 4.0.

1.2 Site Background

1.2.1 Site Description

Detailed site background information including site history and previous site investigation data is provided as part of the June 2014 RI Report. The 701 Lawrence Street site, which is located on the north side of the New York State Barge Canal, was formerly used for petroleum bulk storage circa 1936 and lasting until May 1990. Up until August 2009, the site contained a single, one-story, open-sided 7,450 square foot building with a metal roof and metal siding that was located in the northwestern portion of the property, along with significant amounts of miscellaneous debris and a large aboveground storage tank (AST) throughout the remainder of the property.

The AST and miscellaneous debris have been removed from the subject property and the building structure demolished. The western portion of the subject property is relatively flat, and the ground surface consists of concrete and gravel, while the eastern half of the site is vegetated and contains clusters of small trees. In addition, the western portion of the site is characterized by a hummocky terrain indicative of disturbed ground that may be associated with on-site disposal activities. The site is currently unoccupied and devoid of improvements.

1.2.2 Current and Intended Use

The site is currently zoned E-2 (light industrial) for industrial uses and its compatibility with adjacent commercial and residential uses. The site is presently vacant with no structures. The surrounding parcels to the north by Luquer Street are a vacant lot and an automotive repair facility located on the opposite side of the street. The eastern portion of the site is bordered by remnants of Canal Street and railroad tracks, while the New York Barge Canal forms the southern site boundary. The western side is bound by Lawrence Street, which dead ends before the Erie Canal. (The bridge that historically carried Lawrence Street across the canal has been removed; Lawrence Street continues on the south side of the Erie Canal). The site is enclosed on all sides by a chain-link fence topped with barbed wire. The intended future use of the site is restricted residential.

2.0 Remedial Alternatives Evaluation

2.1 Remedial Goals

The remedial goal is to evaluate options and select a remedy to eliminate or mitigate threats to public health and the environment that upon successful implementation will allow the NYSDEC to issue a Certificate of Completion (COC) for the ERP site. This evaluation must take into account the potential exposure pathways under current and potential future conditions. The NYSDEC has identified a hierarchy of remedial goals in 6 NYCRR Part 375-1.8 (c) (1) as follows, ranked from most preferable to least preferable:

1. Removal and/or treatment. All sources, concentrated solid or semi-solid hazardous substances, dense non-aqueous phase liquid, light non-aqueous phase liquid and/or grossly contaminated media shall be removed and/or treated; provided however, if the removal and/or treatment of all such contamination is not feasible, such contamination shall be removed or treated to the greatest extent feasible.
2. Containment. Any source remaining following removal and/or treatment shall be contained; provided however, if full containment is not feasible, such source shall be contained to the greatest extent feasible.
3. Elimination of exposure. Exposure to any source remaining following removal, treatment and/or containment shall be eliminated through additional measures, including but not limited to, as applicable, the timely and sustained provision of alternative water supplies and the elimination of volatilization into buildings; provided however, if such elimination is not feasible such exposure shall be eliminated to the greatest extent feasible.
4. Treatment of source at the point of exposure. Treatment of the exposure resulting from a source of environmental contamination at the point of exposure, as applicable, including but not limited to, wellhead treatment or the management of volatile contamination within buildings, shall be considered as a measure of last resort.

As outlined in the RI Report Baseline Risk Assessment, due to the presence of metals in the surface and subsurface soils, a single isolated occurrence of acetone in one of the IRM soil clearance samples, and VOC and SVOC TICs in the analyzed IRM soil clearance, surface soil, subsurface soil, and groundwater samples, the potential absorption and ingestion pathways at the site (both on-site and off-site) are complete.

2.2 Remedial Action Objectives

The final remedial measures for the site must satisfy Remedial Action Objectives (RAOs), which are site-specific statements that convey the goals for minimizing or eliminating substantial risks to public health and the environment.

The RAO's for the site were identified in the RI Report and include:

1. Develop site management practices to address exposure pathways associated with hypothetical potential future site work (metals, VOCs, and VOC and SVOC TICs).

With an understanding of the NYSDEC's hierarchy of remedial goals as outlined in Section 2.1 above, the RAO's will be evaluated against the following criteria:

1. Overall Protection of Public Health and the Environment – This criterion is an evaluation of the remedy's ability to protect public health and the environment, assessing how risks posed through each existing or potential pathway of exposure are eliminated, reduced, or controlled through removal, treatment, engineering controls, or institutional controls.
2. Compliance with Standards, Criteria, and Guidance (SCGs) – Compliance with SCGs addresses whether a remedy will meet applicable environmental laws, regulations, standards, and guidance. The NYSDEC standard utilized for comparison of alternatives is the Part 375 Soil Cleanup Objectives (SCOs) for Unrestricted Use.
3. Long-Term Effectiveness and Permanence – This criterion evaluates the long-term effectiveness of the remedy after implementation. It is anticipated that residual contamination will remain on-site after the selected remedy has been implemented. This evaluation, therefore, will assess the impact of the remaining contamination on human exposures, ecological receptors and impacts to the environment. The use of institutional and/or engineering controls will be considered as part of this evaluation.
4. Reduction of Toxicity, Mobility or Volume – This criterion is an evaluation of the ability of an alternative or remedy to reduce the toxicity, mobility and volume of site contamination.
5. Short-Term Impact and Effectiveness – This criterion is an evaluation of the potential short-term adverse environmental impacts and human exposures during the construction and/or implementation of an alternative or remedy. Considerations include the potential for human exposures, adverse environmental impacts and nuisance conditions at the site resulting from the implementation of the remedy or alternative. Short term impacts include potential exposures resulting from increased traffic, detours or loss of the use of access to property; odors; vapors; dust; habitat disturbance; run off from the site, and noise. The length of the short-term impacts will be identified for each alternative.
6. Implementability. This criterion is an evaluation of the technical and administrative feasibility of implementing an alternative or remedy. Technical feasibility includes the difficulties associated with construction and the ability to monitor the effectiveness of an alternative or remedy. Administrative feasibility includes the availability of the necessary personnel and material; potential difficulties in obtaining specific operating approvals; access for construction and other concerns.
7. Cost Effectiveness – This criterion is an evaluation of the overall cost effectiveness of an alternative or remedy. A remedy is cost effective if its costs are proportional to its overall effectiveness. To evaluate cost effectiveness:
 - a. the overall effectiveness of an alternative or remedy is determined;

- b. a comparison of the overall effectiveness is then made to the cost of the alternative or remedy; and
 - c. an assessment is made as to whether the cost is proportional to the overall effectiveness, to determine whether it is cost effective.
8. Land Use – This criterion is an evaluation of the current, intended and reasonably anticipated future use of the site and its surroundings, as it relates to an alternative or remedy, when unrestricted levels would not be achieved.
9. Community Acceptance – This criterion is evaluated after the public review of the remedy selection process as part of the final NYSDEC selection/approval of a remedy for a site. Any public comment relative to these criteria will be considered by NYSDEC after the close of the public comment period.

In addition to the evaluation of alternatives to remediate to the likely end use of the Site, NYSDEC regulation and policy require an evaluation of an unrestricted use scenario. The evaluation of a “no-action” and “no further remedial action” alternatives are also required to provide a baseline for comparison against other alternatives.

2.3 General Response Actions

The following section discusses the general response actions that may be utilized within each media of interest in order to achieve the remedial objectives described above.

2.3.1 Remaining Surface Soil Impacts

Nine surface soil samples (SS-01 and SS-09) were collected at the site on October 26-November 24, 2009, and the locations are depicted on Figure 2. Seven of the surface soil samples were collected on-site, while the remaining two samples were collected off-site. The surface soil samples were analyzed for VOCs, SVOCs, metals, and PCBs. The nine collected surface soil samples did not exhibit SVOC or PCB parameter concentrations in exceedance of the applicable Part 375 Soil Cleanup Objectives (SCOs) for Unrestricted Use. However, as indicated in Tables 1 and 2 below, surface soil sample SS-03 exhibited acetone at concentrations greater than the Part 375 Unrestricted Use SCO, and one or more of the following metals were detected at sample locations SS-01, SS-02, SS-03, SS-04, SS-05, SS-06, SS-07, SS-08, and SS-09:

- Chromium
- Copper
- Lead
- Zinc

The analyzed surface soil samples also reported TICs for both VOCs and SVOCs, and Table 3 below summarizes the reported TIC concentrations for each of the analyzed surface soil samples.

Table 1. Surface Soil Sample Exceedances: Volatile Organic Compounds (EPA Methods 8260) Area of Concern 1			
Parameter	Part 375 SCOs (Unrestricted) (ppb)	Part 375 SCOs (Restricted Residential) (ppb)	701LA-SS-03 (ppb)
Acetone	50	100,000	65
Items in bold exceed NYSDEC Part 375 SCOs for Unrestricted Use			

Table 2. Surface Soil Sample Exceedances: Metals (EPA Method 6010B) Area of Concern 1											
Parameter	Part 375 SCOs Unrestricted (ppm)	Part 375 SCOs Restricted Residential (ppm)	701LA-SS- 01	701LA-SS- 02	701LA-SS- 03	701LA-SS- 04	701LA-SS- 05	701LA-SS- 06	701LA-SS- 07 offsite	701LA-SS- 8	701LA-SS- 09 offsite
Chromium	1	110	20	15.5	13.6	15.1	3.76	3.75	8.36	23.5	11.4
Copper	50	270	—	78.1	54.6	114	—	—	—	59.4	—
Lead	63	400	—	—	—	—	—	—	—	244	—
Zinc	109	10,000	—	125	—	131 B,J	—	—	—	289	—
— = Compound was analyzed for, but not detected or did not exceed standard Items in bold exceed NYSDEC Part 375 SCOs for Unrestricted Use B- Analyte was detected in the associated Method Blank. J- Analyte detected at a level less than the Reporting Limit and greater than or equal to the Method Detection Limit. Concentrations in this range are estimated.											

Table 3. Total TICS – VOCs & SVOCs Surface Soil Samples – Area of Concern 1			
On-Site/Off-Site	Sample ID	Total VOC TICS (ppb)	Total SVOC TICS (ppb)
On-site	701LA-SS-01	0	0
	701LA-SS-02	7.8	0
	701LA-SS-03	25.6	0
	701LA-SS-04	0	0
	701LA-SS-05	0	0
	701LA-SS-06	9.1	240
	701LA-SS-08	277	7600
Off-site	701LA-SS-07	0	9590
	701LA-SS-09	0	0

Based on the single exceedance of acetone detected in surface soil sample SS-03, and the reported metal exceedances and presence of VOC and SVOC TICs exhibited in all nine of the analyzed surface soil samples, the area of impacted surface soils essentially encompasses the entire site. Therefore, as indicated on Figure 2, the entire property limits at the 701 Lawrence Street site have been deemed to constitute Area of Concern No. 1 (AOC-1). The estimated area and volume of impacted soil for AOC-1 is presented in the following table:

Table 4. Approximate Area of Metals and SVOC-Impacted Surface Soil				
AOC	Surface Area (ft ²)	Impacted Depth (ft)	Soil Volume (ft ³)	Soil Volume (cy)
1	80,586	2.0 ft	161,172	5,970

2.3.2 Remaining Subsurface Soil Impacts

Nine stormwater treatment system and UST soil clearance samples were collected during the performance of IRM activities at the site, while 57 subsurface soil samples were collected during the advancement of 25 soil borings and 9 groundwater monitoring wells as part of the ERP investigation. As indicated in Tables 5 through 7 below, two of the off-site IRM soil clearance samples and ten of the subsurface soil samples, including one duplicate subsurface soil sample, exceeded the Part 375 Unrestricted SCO values for VOCs.

Table 5. IRM Soil Clearance Sample Exceedances (Off-Site): Volatile Organic Compounds (EPA Method 8260)				
Parameter	Part 375 SCOs (Unrestricted) (ppb)	Part 375 SCOs (Restricted Residential) (ppb)	701LA-T3 BOTTOM	701LA-STV BOTTOM
Acetone	50	100,000	81	—
Ethylbenzene	1000	41,000	—	1700 W1,J,UJ
Xylene	260	100,000	—	1000 W1, UJ
<p>— = Compound was analyzed for, but not detected or did not exceed standard</p> <p>Items in bold exceed NYSDEC Part 375 SCOs for Unrestricted Use</p> <p>W1- Sample was prepared and analyzed utilizing the medium level extraction.</p> <p>J- Analyte detected at a level less than the Reporting Limit and greater than or equal to the Method Detection Limit.</p> <p>Concentrations in this range are estimated.</p> <p>U- Analyzed for but not detected.</p>				

Table 6. Subsurface Soil Sample Exceedances: Volatile Organic Compounds (EPA Method 8260) Area of Concern 1					
Parameter	Part 375 SCOs (Unrestricted) (ppb)	Part 375 SCOs (Restricted Residential) (ppb)	701LA-MW-5 (8-12)	701LA-MW-6 (4-8)	701LA-MW-8 (8-12) (offsite)
Acetone	50	100,000	—	—	59
Ethyl benzene	1000	41,000	1300	2300	—
<p>— = Compound was analyzed for, but not detected or did not exceed standard</p> <p>Items in bold exceed NYSDEC Part 375 SCOs for Unrestricted Use</p>					

As indicated in Tables 8.1 and 8.2 below, 15 of the subsurface soil samples also exhibited chromium and/or nickel at concentrations greater than the applicable NYSDEC standard. Total chromium concentrations in the 15 subsurface samples ranged from 12.5 and 20.1 mg/kg. The total chromium results for all of the subsurface soil samples exceed the Unrestricted Use SCO when compared to the criteria for hexavalent chromium (1 ppm) but are below the criteria for trivalent chromium (30 ppm). Furthermore, the total chromium results are below the intended future site use (Restricted Residential) criteria for hexavalent chromium (30 ppm). Nickel concentrations in the 15 subsurface samples ranged from 30.3 and 39.5 mg/kg. The nickel results for all of the subsurface soil samples barely exceed the Unrestricted Use SCO of 30 ppm. Furthermore, the nickel results are well below the intended future site use (Restricted Residential) criteria (310 ppm).

Table 7: Subsurface Soil Sample Exceedances (Canalway Trail Investigation):

Parameter	Volatile Organic Compounds (EPA Method 8260)										BLIND DUPLICATE 1
	Part 375 SCOs Unrestricted (ppb)	Part 375 SCOs Restricted Residential (ppb)	SB-06 (8'-10')	SB-06 (8'-10')	TRL-SB-01 (2'-4')	TRL-SB-01 (7'-10')	TRL-SB-04 (2'-4')	TRL-SB-04 (6.5'-9')	TRL-SB-12 (6.5'-9')		
Acetone	50	100,000	—	—	52	83	180	190	58	—	110
Ethylbenzene	1000	41,000	6200 E	4300	—	—	—	—	—	—	—
Xylenes, Total	260	100,000	5000	3400	—	—	—	—	—	—	—

**: Dilution Factor is 10 not 1.

— = Compound was analyzed for, but not detected or did not exceed standard.
Items in **bold** exceed NYSDEC Part 375 SCOs for Unrestricted Use.

E - Denotes analyte concentration exceeded calibration range of instrument. Concentration result should be considered as estimated.

Table 8.1 Subsurface Soil Sample Exceedances (On-Site): Metals (EPA Method 6010B) Area of Concern 1

Parameter	Part 375 SCOs Unrestricted (ppm)	Part 375 SCOs Restricted Residential (ppm)	Metals (EPA Method 6010B)									
			701LA-SB-01 (4-8)	701LA-SB-02 (4-8)	701LA-SB-03 (8-12)	701LA-SB-04 (8-12)	701LA-MW-01 (8-12)	701LA-MW-02 (8-12)	701LA-MW-03 (8-12)	701LA-MW-04 (4-8)	701LA-MW-05 (8-12)	701LA-MW-06 (4-8)
Chromium	1	110	19.4	19.4	14.8	16.7	17.7	17.7	15.5	18.7	17.1	20.1
Nickel	30	310	35.3	39.8	-	39.4	32.5 B	36.2	31.7	39.5	30.7 B	33.1 B

— = Compound was analyzed for, but not detected or did not exceed standard.

B- Analyte was detected in the associated Method Blank.

Items in **bold** exceed NYSDEC Part 375 SCOs for Unrestricted Use.

Table 8.2 Subsurface Soil Sample Exceedances (Off-Site): Metals (EPA Method 6010B)

Parameter	Part 375 SCOs Unrestricted (ppm)	Part 375 SCOs Restricted Residential (ppm)	Metals (EPA Method 6010B)									
			701LA-MW-08 (4-8) (offsite)	701LA-MW-08 (8-12) (offsite)	701LA-MW-09 (8-12) (offsite)	701LA-MW-07 (4-8) (offsite)	701LA-MW-07 (12-16) (offsite)					
Chromium	1	110	19.6	14.7	15.1	17.4	12.5					
Nickel	30	30	30.3 B	-	-	-	-					

— = Compound was analyzed for, but not detected or did not exceed standard
Items in **bold** exceed NYSDEC Part 375 SCOs for Unrestricted Use

B- Analyte was detected in the associated Method Blank.

The analyzed IRM soil clearance samples and subsurface soil samples also reported TICs for both VOCs and SVOCs, and Tables 9 and 10 below present the reported TIC concentrations for each of the analyzed IRM soil clearance and subsurface soil samples.

Table 9. Total TICs – VOC & SVOC IRM Soil Clearance Samples – Area of Concern 1			
On-Site/Off-Site	Sample ID	Total VOC TICs (ppb)	Total SVOC TICs (ppb)
On-site	701LA SOIL GT	41,900	19,610
	701LA SOIL T2	128,700	483,000
Off-site	701LA-T3 BOTTOM	1,680	235,900
	701LA-T3 SOUTH	20	0
	701LA-T3 WEST	0	0
	701LA-STV SOUTH	0	0
	701LA-STV NORTH	106.3	0
	701LA-STV BOTTOM	77,000	139,500
	701LA-STV EAST	108.8	0

Table 10. Total TICs – VOC & SVOC Subsurface Soil Samples – Area of Concern 1			
On-Site/Off-Site	Sample ID	Total VOC TICs (ppb)	Total SVOC TICs (ppb)
On-site	701LA-SB-01 (4-8)	2220	35,170
	701LA-SB-02 (4-8)	111.7	2,660
	701LA-SB-03 (8-12)	144	69,600
	701LA-SB-04 (8-12)	73.9	0
	701LA-MW-01 (8-12)	1,770	66,300
	701LA-MW-02 (8-12)	0	2,140
	701LA-MW-03 (8-12)	0	0
	701LA-MW-04 (4-8)	504	34,750
	701LA-MW-05 (8-12)	200,000	66,500
	701LA-MW-06 (4-8)	210,000	116,200
Off-site	701LA-MW-07 (4-8)	1,330	145,300
	701LA-MW-07 (12-16)	289	31,950
	701LA-MW-08 (4-8)	0	20,210
	701LA-MW-08 (8-12)	1,390	162,600
	701LA-MW-09 (8-12)	30.3	57,300

The following table summarizes the vertical extent of contamination and peak PID readings noted during the soil boring installation:

Table 11. Subsurface Soil Samples: Peak PID Readings – Area of Concern 1						
Onsite/ Offsite Location	Boring ID	Visual Contamination	Peak PID Reading (ppm)	Sample Depth of Peak PID Reading (ft)	Depth of Analytical Sample (ft)	Depth to Water Table (ft)
On-site	SB-01	Heavy staining, sheen, product observed	356.0	6.0-7.0	4.0-8.0	2.5
	SB-02	Heavy sheen, strong petroleum odor	153.0	6.0-7.0	4.0-8.0	2.5
	SB-03	Slight odor	10.2	11.0-12.0	8.0-12.0	12.5
	SB-04	Strong petroleum odor, free product observed	15.1	6.0-7.0	8.0-12.0	8.5
	MW-01	No visual/olfactory contamination documented	85.0	9.0-10.0	8.0-12.0	3.5
	MW-02	Slight odor	8.0	3.0-4.0	8.0-12.0	8.5
	MW-03	Petroleum odor	3.5	10.0-11.0	8.0-12.0	9.5
	MW-04	Petroleum odor	86.5	2.0-3.0	4.0-8.0	3.5
	MW-05	Strong petroleum odor	1091.0	10.0-11.0	8.0-12.0	3.5
	MW-06	Strong petroleum odor, sheen	851.0	6.0-7.0	4.0-8.0	2.5
Off-site	MW-07	No visual/olfactory contamination documented	152.0	15.0-16.0	12.0-16.0	12.5
	MW-08	Slight petroleum odor	32.2	10.0-11.0	4.0-12.0	9.5
	MW-09	Slight petroleum odor, no visible stain/sheen	1.5	11.0-12.0	8.0-12.0	3.5

Based on the information presented in Tables 5 through 11 above, almost the entire lateral extent of subsurface soils present within the property limits at the 701 Lawrence Street site exhibit some degree of petroleum contamination. Therefore, Area of Concern No. 1 (AOC-1) also encompasses all of the subsurface soil within the property limits down to a depth of 15 feet below the ground surface. The estimated area and volume of impacted soil in AOC-2 is presented in the following table:

Table 12. Approximate Area of Petroleum-Impacted Subsurface Soil				
AOC	Surface Area (ft ²)	Impacted Depth (fbg)	Soil Volume (ft ³)	Soil Volume (cy)
1	80,586	15 ft.	1,208,790	44,770

2.3.3 Remaining Groundwater Impacts

Groundwater samples were collected from the nine monitoring wells on February 24, 2010, and a summary of the monitoring well data is provided in the June 2014 RI Report prepared by B&L. Samples were analyzed for VOCs, SVOCs, Metals and PBCs. As indicated on Figure 2, six of the monitoring wells (MW-1 through MW-6) are located on-site, while the three remaining monitoring wells (MW-7 through MW-9) are located off-site. None of the analyzed groundwater quality samples exhibited VOC, SVOC or PCB concentrations in exceedance of the NYSDEC Groundwater Standards. However, each of the analyzed groundwater samples exhibited several

exceedances of the metals parameters iron manganese, and sodium, which are likely attributable to elevated sample turbidity. In addition, various VOC and SVOC TICs were detected at low concentrations in four of the nine analyzed groundwater samples. However, there are no private water supply wells serving nearby residents (residents are serviced by the City's public water supply system), and as such there are no complete exposure pathways for the ingestion of groundwater from the site.

Although there are no surface water bodies at the site, groundwater leaving the site and discharging to down gradient surface water bodies is a viable contaminant transport mechanism. However, since the groundwater does not appear to be significantly impacted, this transport mechanism does not appear to warrant further evaluation.

2.3.4 General Response Actions and Treatment Technologies

2.3.4.1 Soil

Capping – The placement of a “cap” above an area of contaminated soil is a remedial method to contain and limit contact with the soil. A cap can be constructed of soil, asphalt pavement, clay, or a geomembrane synthetic. Depending on the material of construction, the cap may shed or limit water infiltration into the area of concern. For the project site, a cap may be an effective remedial option that can achieve a remedial objective of limiting a contaminant exposure pathway.

Source Removal – The excavation of contaminated soils is an effective method to quickly and permanently remove areas of concern from a site. Source removal requires prior delineation of the boundaries of the area of concern. This information has been provided as part of the ERP investigation. Following source removal, clearance sampling is conducted to verify that all contaminated soil was removed. In areas of high groundwater, groundwater control would be required to effectively complete the soil excavation. Source removal would require handling of clean overburden for staging as backfill, prior to excavation and removal of contaminated soils. Typical costs associated with source removal include capital costs for the excavation equipment, disposal costs for the treatment or disposal of contaminated media, laboratory costs for clearance sampling, costs for replacement backfill, and any costs associated with groundwater control and/or treatment. Source removal could be successful in the elimination of TICs, metals, and/or VOC-contaminated surface and subsurface soils from the site in order to achieve Part 375 Unrestricted Use SCOs.

2.4 Development of Remedial Alternatives

This section proposes the remedial alternatives for the Site, which are subsequently evaluated against the ERP program criteria and DER-10. Three (3) remedial alternatives have been evaluated which include:

1. No Action,
2. Placement and Maintenance of a Soil Cap for Exposure Reduction and Development of Institutional Controls,

3. Soil Excavation with Off-Site Disposal.

Each alternative is summarized below and is evaluated in detail against the nine ERP criteria.

Alternative 1 – Alternative 1 would result in No Action. This alternative does not require any additional remedial actions at the site. The existing exposure scenarios associated with the TICs, metals, and/ or VOC-contaminated surface and subsurface soils at the site will preclude this option.

Alternative 2 – Since IRMs have already been conducted at the site, this alternative considers the placement and maintenance of a two-foot thick cap for exposure reduction and the development of Institutional Controls. Specifically, an environmental easement would be put in place, and a Site Management Plan prepared. This restriction would limit the future uses of the property and prevent exposure to site soils. The Site Management Plan would identify the necessary procedures to be utilized if future site work were conducted within AOC-1 or AOC-2 which encompass the entire property limits. The property owner would be required to submit a periodic certification of the engineering and institutional controls.

Alternative 3 - Alternative 3 would include the source removal of the petroleum-contaminated surface and subsurface soils across the site to a depth of 15 feet below the ground surface (bgs) in order to satisfy the requirements of Part 375-3.8(e)(2)(iii) for Unrestricted Residential Use. Upon removal of the contaminated soils, the excavation areas would be backfilled with clean soil. The excavation area would be covered with a soil cap that covers the entire site. Confirmation soil sampling at the edges and bottom of the excavated area would be included in the alternative.

2.5 Detailed Analysis of Remedial Alternatives

This section evaluates the feasibility and cost-effectiveness of the proposed remedial alternatives developed for the Site. A total of three remedial alternatives were evaluated to address the contaminated surface soil and contaminated subsurface soil. Each alternative is evaluated against the ERP program criteria, including:

- Overall Protection of Public Health and the Environment;
- Compliance with Standards, Criteria, and Guidance (SCGs);
- Long-Term Effectiveness and Permanence;
- Reduction of Toxicity, Mobility or Volume;
- Short-term impact and effectiveness;
- Implementability;
- Cost effectiveness;
- Land use; and
- Community acceptance.

2.5.1 *Alternative 1 – No Action*

This alternative does not require any additional remedial actions at the site. Although residual petroleum-derived contaminants were noted in both the surface soil and subsurface soil above NYSDEC Unrestricted Use soil cleanup criteria, there are limited exposure scenarios, and natural attenuation processes would continue to reduce the contaminant burden at the site. Again, compliance with the state standards would not be achieved for an extended period of time. This alternative will be accompanied with a deed restriction and a soil management plan.

This Alternative provides no protection of public health and the environment; will not meet compliance with standards, criteria, and guidance; has no long-term effectiveness and permanence; provides no reduction of toxicity, mobility or volume; and has no short-term impact and effectiveness. This option is fully implementable. This option is the most cost effective for the City of Rome. This option would not support the intended restricted residential land use of the site, and is not likely to be accepted by the community.

Given the existing exposure scenarios identified as part of the Baseline Risk Assessment, this option will not be further evaluated.

2.5.2 *Alternative 2 –Placement of Cap for Exposure Reduction and Development of Institutional Controls*

This alternative includes the placement of a two-foot thick soil cap over the entire site and provides for the attenuation of site contamination through natural processes including dilution, absorption, and dispersion. This alternative will be accompanied with a deed restriction, soil management plan, and groundwater use restriction.

Prior to the installation of the two-foot thick layer of clean soil material, a demarcation layer (e.g., orange plastic construction fence) will be installed on top of the graded and compacted ground surface. The soil capped areas will be graded to match adjacent grade and seeded to establish vegetation. Upon installation of the soil capping system, periodic maintenance in the form of mowing, erosion control, and repairing any compromised areas of the cap, will be necessary. This alternative will be accompanied with a deed restriction, soil management plan, and groundwater use restriction.

The installation of a two-foot thick soil cover layer at the site would eliminate the direct contact exposure pathway that exists due to the presence of VOC and SVOC TICs, metals, and/or VOC-contaminated soils in AOC-1 at concentrations above the applicable Part 375 Unrestricted Use SCOs. However, there are future potential risks for human exposure to the contaminated soils onsite during the performance of site development activities that involve the excavation of subsurface soils. The appeal of this alternative is in its obvious cost-effectiveness. In time, the metals, VOCs, SVOC TICs, and VOC TICs concentrations in the soil may decrease due to natural attenuation processes. Compliance with State standards, however, would likely not be achieved.

2.5.2.1 Overall Protection of Public Health and the Environment

The contaminated soils present on-site would no longer pose a threat to human health and the environment under existing exposure scenarios due to the completed installation of the two-foot thick soil cap over the entire site limits. Since this alternative does not utilize a technology to enhance reduction in contaminants, a reduction in the metals and VOC And SVOC TIC concentrations in the soil will be solely dependent on natural attenuation processes. Based on the contaminant concentrations, it is anticipated that residual contaminants would remain on-site for the long-term. Future on-site development that could create the possibility for direct contact with the TICs, metals, and VOC-contaminated soils in AOC-1/AOC-2 would need to incorporate engineering controls during construction. Maintenance of the two-foot thick soil cover layer would reduce exposure risks, while the implementation of Institutional Controls, including an environmental easement and Site Management Plan, would address future hypothetical exposure scenarios.

2.5.2.2 Compliance with Standards, Criteria and Guidance (SCG)

Since there are no actions associated with Alternative 2 which will cause an immediate reduction in residual contaminant concentrations, this alternative will not immediately comply with SCGs regarding soil quality.

2.5.2.3 Long-Term Effectiveness and Permanence

This option would allow site contaminants above the Part 375 Unrestricted Use SCOs to remain for the long-term. Although the degradation of contaminants at the site may not reach the ERP criteria, there are minimal existing human or environmental health concerns. This is due to the fact that the VOC and SVOC TICs, metals, and/or VOC-contaminated soils present in AOC-1 would be completely covered with a two-foot thick layer of clean fill material. Other than during site construction, during which engineering controls may be employed if AOC-1 is to be disturbed, the installed two-foot thick soil cover layer will continue to prevent direct contact with the VOC and SVOC TICs, VOC, and metals-contaminated soil.

2.5.2.4 Reduction of Toxicity, Mobility or Volume

This Alternative is based on natural attenuation processes for contaminant reduction. The concentration of VOC and SVOC TICs, metals, and/or VOC-contaminated soil in AOC-1 will slowly decrease, but the time involved far exceeds other alternatives.

2.5.2.5 Short-Term Impact and Effectiveness

The remedial action of cap placement is of short duration, and utilizes standard construction techniques. Community Air Monitoring Plan (CAMP) requirements would be in effect, monitoring the ambient air for contaminants of concern.

The placement of a cap would take approximately two months to complete. No site restoration would be required following the completion of this Alternative, as the site is currently vacant. There will be no short-term change in the concentration of residual contaminants. Since many of

the residual contaminants are organic compounds, they would continue to degrade with time by natural attenuation mechanisms.

2.5.2.6 Implementability

The techniques described in this remedial alternative are commonly practiced among remediation contractors.

2.5.2.7 Cost Effectiveness

The estimated capital expenditure associated with this alternative is approximately \$147,400. With the inclusion of engineering costs, administration, bonds, insurance, and a 15 percent contingency, the estimated total for this remedial alternative is approximately \$205,130.

A detailed breakdown of the estimated costs to implement this alternative is presented in Appendix A. Table 13 (included as part of Section 3 – Analysis of Cost-Benefit Relationship) summarizes the estimated capital costs associated with each alternative.

2.5.2.8 Land Use

In developing and screening remedial alternatives, NYSDEC's Part 375 regulations require that the reasonableness of the anticipated future land be factored into the evaluation. DER-10 (Section 4.2 i) identifies 16 criteria that must be considered. The site is currently zoned E-2 (light industrial) for industrial uses and its compatibility with adjacent commercial and residential uses. Restricted residential is the proposed future use of the property. Therefore, this Alternative is supportive of the intended future site use.

2.5.2.9 Community Acceptance

Given that the site is currently vacant, the community acceptance of this Alternative is considered to be moderate, as the adjacent commercial and residential properties would be inconvenienced during the performance of remedial activities. An increase in truck traffic for the hauling of clean backfill materials will also have a temporary impact on traffic patterns within the City.

2.5.3 Alternative 3 – Soil Excavation with Off-Site Disposal

Alternative 3 includes excavation, removal, and off-site disposal of TICs, metal, and/or VOC-contaminated soil across the entire site. In order to satisfy the requirements of Part 375-3.8(e)(2)(iii) for Unrestricted Residential Use, soil across the site would be removed to a depth of 15 bgs. Therefore, the volume of contaminated soil above the Part 375 Unrestricted Use SCOs that may potentially exist within the limits of the property is estimated to be 1,208,790 cubic feet or 44,770 cubic yards. The actual horizontal and vertical limits of excavation would be based on the laboratory analysis of confirmatory soil samples that would be collected from the side walls and excavation pit bottom for verification that the affected soils are removed.

If groundwater is encountered while excavating, well points (or other groundwater suppression devices) will be installed, and the water level maintained at or below the bottom of the

excavation. Water removed from the excavation will be tested prior to discharging/disposal. Upon removal of the contaminated soils, confirmatory soil samples will be collected from the outside perimeter and bottoms of the excavation. After confirmation sampling, the excavation pit will be backfilled with clean soil and vegetation will be established. This alternative will be accompanied with a deed restriction, soil management plan, and groundwater use restriction.

2.5.3.1 Overall Protection of Public Health and the Environment

This alternative would remove the remaining residual soil contaminants from the site, and would therefore eliminate the exposure pathways associated with the TICs, metals and VOC-contaminated surface and subsurface soils. Alternative 4 is protective of human health and the environment.

2.5.3.2 Compliance with Standards, Criteria and Guidance (SCG)

The removal of the contaminated soil will immediately result in accessible site soils meeting Part 375 Unrestricted Use SCOs. Clearance sampling of the excavation sidewalls and bottom will confirm that the objectives are met.

2.5.3.3 Long-Term Effectiveness and Permanence

The long-term effectiveness of Alternative 3 is excellent assuming all of the TICs, metals, and VOC-contaminated soils are removed from the site. The Alternative could be completed within 2 months of selection. Since the contaminants are removed from the site, there are no residual risks associated with this Alternative, and no further site controls would be required.

2.5.3.4 Reduction of Toxicity, Mobility or Volume

This Alternative would result in the removal of approximately 44,770 cubic yards (66,483 tons) of contaminated soils from the Site. The removal of the contaminants from the Site is permanent.

2.5.3.5 Short-Term Impact and Effectiveness

This remedial action is of relatively short duration, and utilizes standard construction techniques. Since the Alternative would involve open excavation, the Contractor will employ construction barricades and signage to warn and prevent access by the public. Community Air Monitoring Plan (CAMP) requirements would be in effect, monitoring the ambient air for contaminants of concern. Since this alternative includes the removal of the residual contaminated soil, immediate site improvements are likely.

The field work for this Alternative could be completed in three months. Receipt and analysis of clearance soil sampling data will require approximately one month. Based on this timing, this Alternative would take approximately 4 months to complete. No site restoration would be required following the completion of this Alternative, as the site is currently vacant.

2.5.3.6 Implementability

The techniques described in this remedial alternative are commonly practiced among remediation contractors.

2.5.3.7 Cost Effectiveness

The estimated capital expenditure associated with this alternative is approximately \$4,789,049. With the inclusion of engineering and laboratory costs, and a 15 percent contingency, the estimated total for this remedial alternative is approximately \$6,666,962. The estimate includes soil excavation, transport and disposal, and site restoration.

Since the work involved under this alternative is intended to permanently remediate the area of contamination, there is no post-remediation maintenance and operational costs once the work is complete. As a result, the relative cost-benefit associated with this alternative is low. This is indicative of the high capital costs. A detailed breakdown of the estimated costs to implement this alternative is presented in Appendix A. Table 13 (included as part of Section 3 – Analysis of Cost-Benefit Relationship) summarizes the estimated capital costs associated with each

2.5.3.8 Land Use

The site is currently zoned E-2 (light industrial) for industrial uses and its compatibility with adjacent commercial and residential uses. Restricted residential is the proposed future use of the property. Therefore, this Alternative is supportive of the intended future site use.

2.5.3.9 Community Acceptance

Given that the site is currently vacant, the community acceptance of this Alternative is considered to be moderate, as the adjacent commercial and residential properties would be inconvenienced during the performance of remedial activities. An increase in truck traffic for the hauling of contaminated soils and clean backfill materials will also have a temporary impact on traffic patterns within the City.

3.0 Analysis of Cost-Benefit Relationship

The capital costs associated with each alternative are summarized below in Table 13. A detailed cost estimate for Alternative 3 is presented in Appendix A.

Alternative 1, "No Action," is not protective of human health and the environment since it does not address existing and potential future exposure scenarios. Although there is no capital cost associated with this alternative, the cost-benefit of Alternative 1 is low.

Alternative 2 (placement of a two-foot thick cap and the implementation of institutional controls) requires the expenditure of additional capital costs for the installation of the two-foot thick soil cover layer. Alternative 2 is fully protective of human health and the environment, as the installation of a two-foot thick soil cover layer at the site will eliminate the existing exposure pathway. Future exposure pathways would be addressed through institutional controls provided as part of this remedy. There are no future capital expenditures required for this alternative, and therefore this remedy represents the greatest cost-benefit scenario.

Alternative 3 (soil excavation and disposal) is the most costly remedy, though the alternative could be completed in approximately 4 months. Since the contaminants would be removed from the site, this Alternative is protective of human health and the environment since it addresses existing exposure scenarios. Since the work involved under this alternative is intended to permanently remediate the areas of contamination, there is no post-remediation maintenance and operational costs once the work is complete. As a result, the relative cost-benefit associated with this alternative is high, however the benefit is good.

The implementation of remedial Alternative 2 (placement of cap and the implementation of institutional controls) was recommended for the following reasons:

- The risk analysis identified an exposure pathway that is attributable to the exposed TICs, metals, and VOC-contaminated soils on the property. The installation of a two-foot thick soil cover layer at the site will eliminate the existing exposure pathway. However, there are hypothetical future exposure scenarios associated with the performance of on-site construction activities involving the excavation of subsurface soils.
- The above conditions preclude Alternative 1 (No Action) from being selected.
- Alternative 3 was not selected due to the extensive capital cost and is no more protective of human health and the environment than Alternative 2.

Alternative 2 (placement of a cap and the implementation of institutional controls) is recommended, and the NYSDEC Central Office staff involved in this ERP project concur with this recommendation. This approach would be protective of human health and the environment, and has the highest cost-benefit.

Table 13. Summary of Remedial Alternative Costs					
Remedial Alternatives	Capital Costs	Engineering & Contingency Costs	Annual Operation & Maintenance	Estimated Number of Months of Operation	Total Estimated Costs
Alternative 1 – “No Action”	\$0	\$0	\$3,000	0	\$3,000
Alternative 2 – Placement of a Soil Cap with Institutional Controls (Soil Cover Layer, Site Mgmt. Plan)	\$147,404	\$55,126	\$3,000	2	\$205,130
Alternative 3 – Soil Excavation and Off-Site Disposal	\$4,789,049	\$1,874,913	\$3,000	4	\$6,666,962

Based on the analysis conducted above, the Alternative 2 remedy including the placement of a cap and the development of institutional controls, was recommended to address the existing and future hypothetical exposure scenarios. The estimated cost associated with Alternative 2 is \$205,130.

3.1 Summary of Remedial Alternatives Evaluation

Three remedial alternatives were evaluated to address the remedial objectives at the site. Areas and contaminants of concern include TICs, metals, and VOCs in the surface and subsurface soil above applicable State standards.

Alternative 1 (No Action) would not require any additional remedial actions at the site. This alternative is not protective of human health and the environment under existing and hypothetical future conditions.

Alternative 2 relies on the placement of a cap and the development of institutional controls. The total cost of this alternative is estimated at \$205,130. This option would be protective of human health and environment and addresses future hypothetical exposure scenarios.

Alternative 3 includes the excavation of residual contamination above State standards. This alternative would permanently remediate the area of contamination with no post-remediation maintenance or operational costs. The total cost of Alternative 3 is estimated at \$6,666,962, which is estimated to cost an additional \$6,461,832 than Alternative 2, and is no more protective of human health and the environment.

A key factor in the analysis of possible remedial alternatives was to determine if the resulting benefit to potential human health exposures and impacts to the environment warranted additional capital expenditures. Given the current TICs, metals, and VOC-contaminated soil exposure scenarios, additional measures are warranted.

Alternative 2, which relies on the placement of a cap and the development of institutional controls, would address all future exposure scenarios. This approach is recommended, as it would be effective in protecting human health and the environment, along with addressing all future hypothetical exposure scenarios.

4.0 References

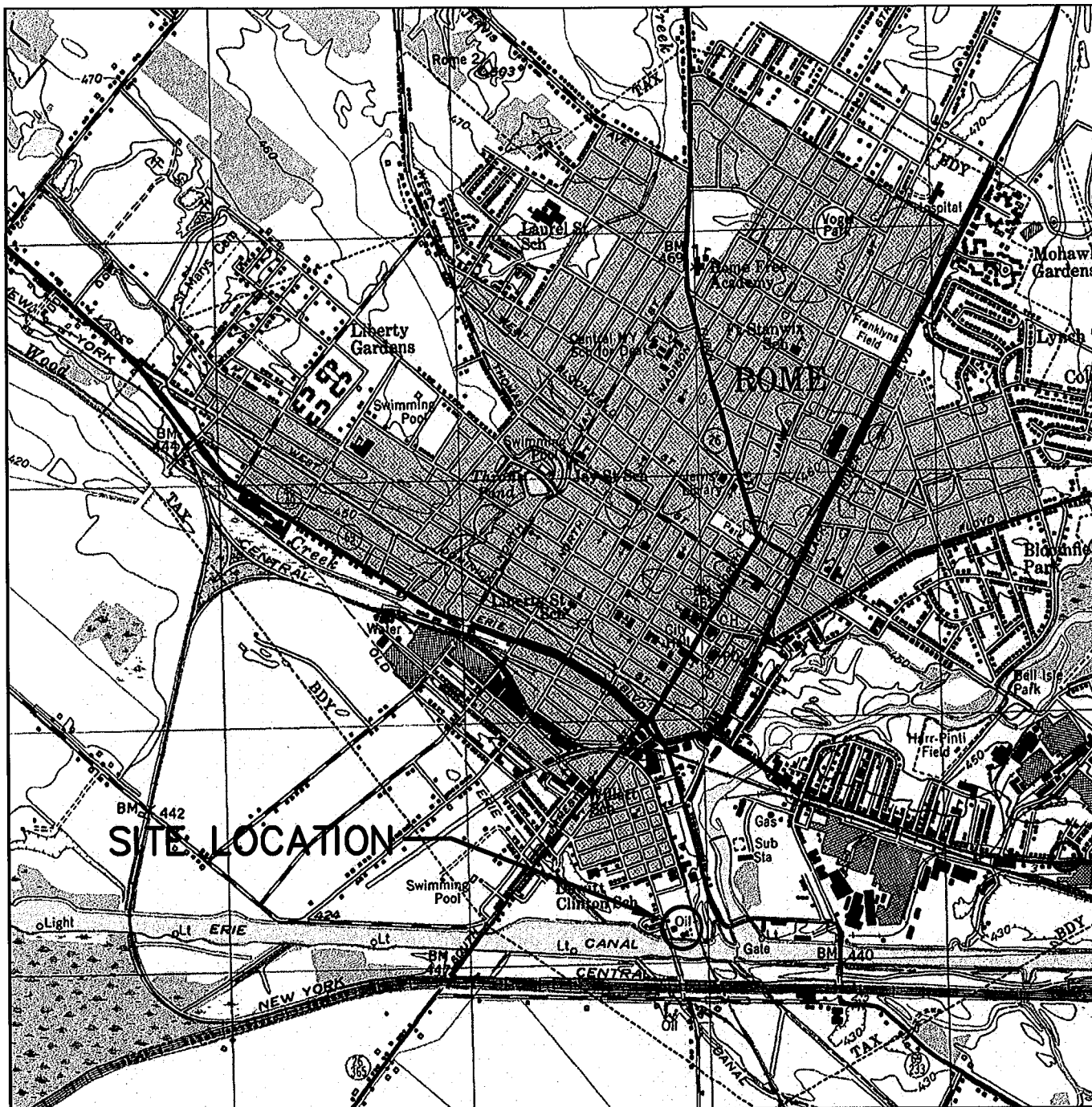
New York State Department of Environmental Conservation, May 2010. DER-10 / Technical Guidance for Site Investigation and Remediation. DEC Program Policy, Office of Remediation and Materials Management.

New York State Department of Environmental Conservation, December 2006. 6 NYCRR PART 375, Environmental Remediation Programs, Subparts 375-1 to 375- 4 & 375-6. Division of Environmental Remediation.

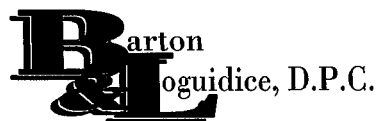
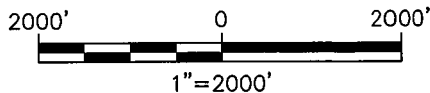
New York State Department of Environmental Conservation, 1998. "Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations", Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1. Reissued June 1998.

Figure 1
Site Location Map

Plotted: Jun 04, 2014 - 10:59AM SYR By: JGSZ
I:\Shared\200\245005-S\SIR FIGURES\REMEDIAL INVESTIGATION REPORT\245005_701LA REM_INV_FIG 1.dwg



SOURCE: ROME, NEW YORK U.S.G.S. QUADRANGLE MAPS, DATE 1984.



CITY OF ROME
REMEDIAL INVESTIGATION
701 LAWRENCE STREET
SITE LOCATION PLAN

Figure Number
1

Project Number
245.005

Date
JUNE, 2014

Scale
1" = 2000'

CITY OF ROME

ONEIDA COUNTY, NEW YORK

Figure 2

**Areas of Concern and
Remedial Investigation Soil Data Summary**

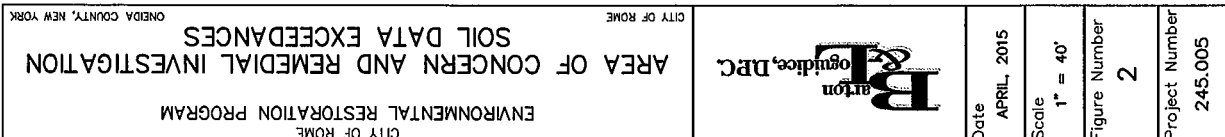
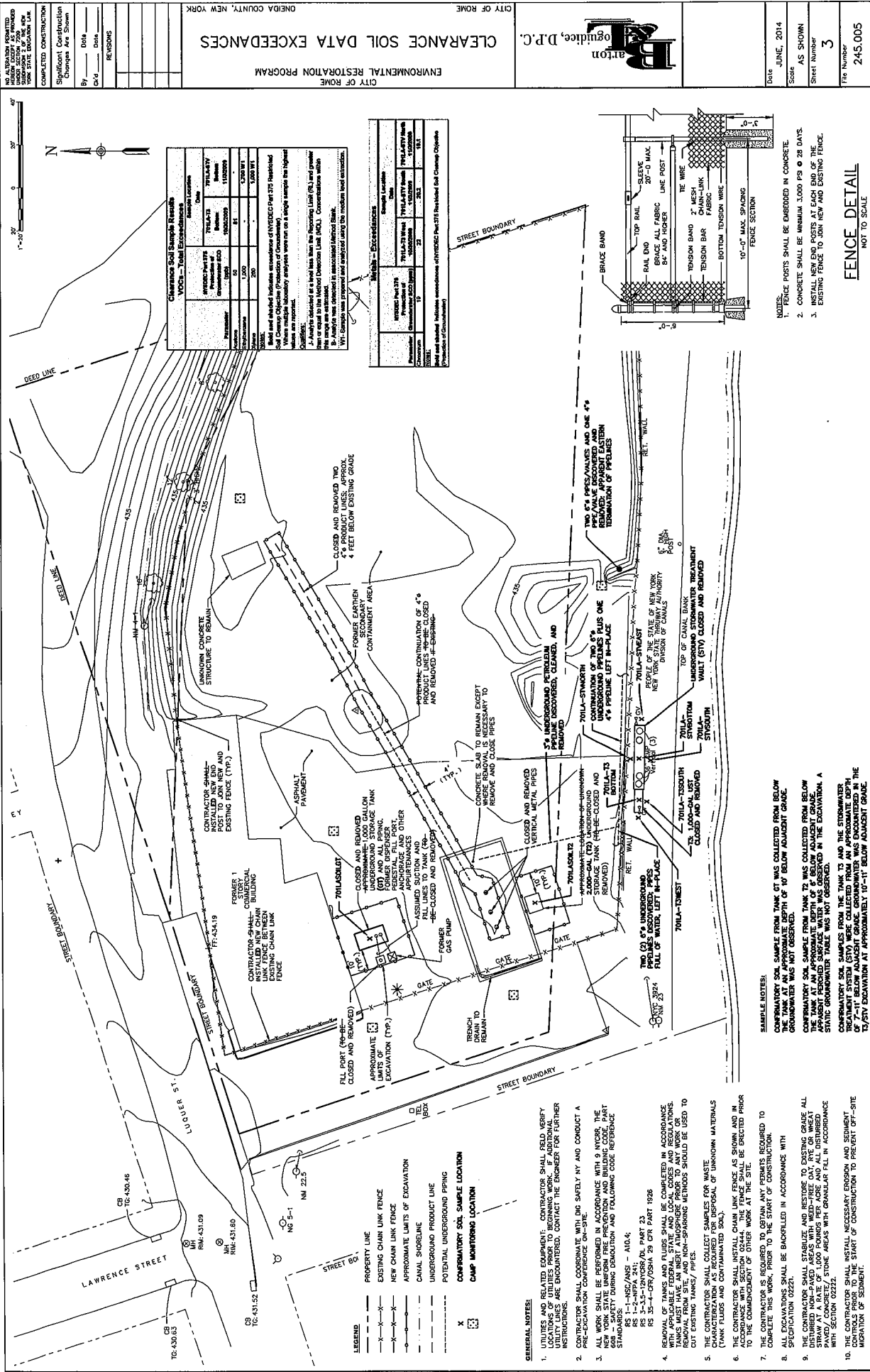


Figure 3

IRM Clearance Soil Data Exceedances



1. UTILITIES AND RELATED EQUIPMENT: CONTRACTOR SHALL FIELD VERIFY LOCATIONS OF UTILITIES PRIOR TO BEGINNING WORK. IF ADDITIONAL INFORMATION IS REQUIRED, CONTACT THE ENGINEER FOR FURTHER INSTRUCTIONS.

2. CONTRACTOR SHALL CONDUCT A PRE-CONSTRUCTION CONFERENCE ON-SITE.

3. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH 9 NYCRR, THE NEW YORK STATE UNIFORM FIRE PREVENTION AND BUILDING CODE, PART 901, AND ANY OTHER APPLICABLE CODES AND REGULATIONS.

4. REMOVAL OF TANKS AND FLUIDS SHALL BE COMPLETED IN ACCORDANCE WITH 9 NYCRR, THE NEW YORK STATE UNIFORM FIRE PREVENTION AND BUILDING CODE, PART 901, AND ANY OTHER APPLICABLE CODES AND REGULATIONS.

5. THE CONTRACTOR SHALL COLLECT SAMPLES FOR WASTE (TANK FLUIDS AND CONTAMINATED SOIL).

6. THE CONTRACTOR SHALL INSTALL CHAIN LINK FENCE AS SHOWN AND IN ACCORDANCE WITH SECTION 02444. THE FENCE SHALL BE ERECTED PRIOR TO THE COMMENCEMENT OF OTHER WORK AT THE SITE.

7. THE CONTRACTOR IS REQUIRED TO OBTAIN A PERMIT FROM THE CITY OF ROWE FOR THE ERECTION OF A FENCE.

8. ALL EXCAVATIONS SHALL BE BACKFILLED IN ACCORDANCE WITH SPECIFICATION 02221.

9. THE CONTRACTOR SHALL STABILIZE AND RESTORE TO EXISTING GRADE ALL DISTURBED NON-PAVED AREAS WITH WEED-FREE TOP SOIL OR WHATEVER MATERIAL IS AVAILABLE. STABILIZED AREAS SHALL BE COVERED WITH SHAVED CONCRETE / STONE AREAS WITH GRANULAR FILL IN ACCORDANCE WITH SECTION 02222.

10. THE CONTRACTOR SHALL INSTALL NECESSARY EROSION AND SEDIMENT CONTROLS PRIOR TO THE START OF CONSTRUCTION TO PREVENT OFF-SITE EROSION OF SOIL.

GENERAL NOTES:

1. UTILITIES AND RELATED EQUIPMENT: CONTRACTOR SHALL FIELD VERIFY LOCATIONS OF UTILITIES PRIOR TO BEGINNING WORK. IF ADDITIONAL INFORMATION IS REQUIRED, CONTACT THE ENGINEER FOR FURTHER INSTRUCTIONS.

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Appendix A

Remedial Alternative Cost Estimates

City of Rome Environmental Restoration Project
701 Lawrence Street - Remedial Alternatives
Alternative 2 - Placement of a Two-foot Thick Soil Cap

Item	Unit cost	Unit	Quantity	Cost
Placement of Soil Cap				
Demarcation layer	\$2.25	sy	8,954	\$20,147
Placement and compaction of clean fill material	\$13.00	cy	5970	\$77,610
Six-inch layer of topsoil, seeding, and stabilization	\$5.50	sy	8,954	\$49,247
Subtotal Remedial Work				\$147,004
Administration, Bonds, Insurance (10%)				\$14,700
Project Subtotal				\$161,704
Engineering (10%)				\$16,170
Contingency (15%)				\$24,256
Annual Operation and Maintenance				\$3,000
Opinion of Probable Costs				\$205,130

Preliminary Estimate for On-Site Soil Excavation
City of Rome Environmental Restoration Project
701 Lawrence Street - Remedial Alternatives
Alternative 3 - Excavate and Remove 15' of Soil Over the Entire Site

Item	Unit cost	Unit	Quantity	Cost
General and Site Preparation				
Mobilization	\$5,000.00	ls	1	\$5,000
Clear, grub, removal of debris	\$5,850.00	ls	1	\$5,850
Silt fence and stormwater control	\$1,800.00	ls	1	\$1,800
Excavation				
Excavate and stockpile clean materials (overburden)	\$5.00	cy	0	\$0
Contaminated soil excavation, transport, & disposal (including backfill and compaction)	\$68.00	ton	66,483	\$4,520,875
Clearance sampling (VOCs, SVOCs, metals)	\$400.00	sample	127	\$50,800
Dewatering				
Pump, treat and discharge to sanitary sewer (onsite connection) including all treatment equipment	\$0.25	gallon	482,291	\$120,573
Restoration				
Backfill and compaction of clean overburden	\$2.00	cy	0	\$0
Density testing (nuclear method)	\$39.00	ea	895	\$34,905
Topsoil, seeding, and stabilization	\$5.50	sy	8,954	\$49,247
Subtotal Remedial Work				\$4,789,049
Administration, Bonds, Insurance (10%)				\$478,905
Engineering (10%)				\$526,795
Contingency (15%)				\$869,212
Annual Operation and Maintenance				\$3,000
Opinion of Probable Costs				\$6,666,962

Appendix B

Part 375 Land Use Considerations

REMEDIAL ALTERNATIVES ANALYSIS LAND USE FACTORS

I. CURRENT USE AND HISTORICAL AND/OR RECENT DEVELOPMENT PATTERNS

The site has historically been used for industrial purposes. The site is presently vacant with no structures. The site is currently zoned E-2 (light industrial) for industrial uses and its compatibility with adjacent commercial and residential uses. The surrounding parcels are mixed commercial, residential, and industrial. The intended future use of the site is restricted residential.

II. CONSISTENCY OF PROPOSED USE WITH APPLICABLE ZONING LAWS AND MAPS

Proposed use is consistent with City of Rome zoning designation.

III. BROWNFIELD OPPORTUNITY AREAS

The site is located within a designated Brownfield Opportunity Area.

IV. CONSISTENCY OF PROPOSED USE WITH APPLICABLE COMPREHENSIVE COMMUNITY MASTER PLANS, LOCAL WATERFRONT REVITALIZATION PLANS AS PROVIDED FOR IN ARTICLE 42 OF THE EXECUTIVE LAW OR ANY OTHER APPLICABLE LAND-USE PLAN FORMALLY ADOPTED BY A MUNICIPALITY

Proposed mixed use is consistent with local land use.

V. PROXIMITY TO REAL PROPERTY CURRENTLY USED FOR RESIDENTIAL USE AND TO URBAN, COMMERCIAL, INDUSTRIAL, AGRICULTURAL AND RECREATIONAL AREAS

The subject parcel is bordered to the north by Luquer Street, with a vacant lot and an automotive repair facility located on the opposite side of the street. The eastern portion of the site is bordered by remnants of Canal Street and railroad tracks, while the New York Barge Canal forms the southern site boundary. The western side is bound by Lawrence Street, which dead ends before the Erie Canal.

VI. ANY WRITTEN AND ORAL COMMENTS SUBMITTED BY MEMBERS OF THE PUBLIC ON THE PROPOSED USE AS PART OF CITIZEN PARTICIPATION ACTIVITIES

To date there have been no written or oral comments submitted by the public.

VII. ENVIRONMENTAL JUSTICE CONCERNS, WHICH FOR PURPOSES OF THIS EVALUATION, INCLUDE THE EXTENT TO WHICH THE PROPOSED USE MAY REASONABLY BE EXPECTED TO CAUSE OR INCREASE A

DISPROPORTIONATE BURDEN ON THE COMMUNITY IN WHICH THE SITE IS LOCATED, INCLUDING LOW-INCOME MINORITY COMMUNITIES, OR TO RESULT IN A DISPROPORTIONATE CONCENTRATION OF COMMERCIAL OR INDUSTRIAL USES IN WHAT HAS HISTORICALLY BEEN A MIXED USE OR RESIDENTIAL COMMUNITY

The proposed use for the site is not changing.

VIII. FEDERAL OR STATE LAND-USE DESIGNATIONS RELATING TO THE PROPERTY

N/A

IX. WHETHER THE POPULATION GROWTH PATTERNS AND PROJECTIONS SUPPORT THE PROPOSED USE

The proposed use is consistent with historical and current use of the property.

X. ACCESSIBILITY TO EXISTING INFRASTRUCTURE;

The site is connected to the City's public water supply and sanitary sewer system. The site is serviced by electric and gas utilities.

XI. PROXIMITY OF THE SITE TO IMPORTANT CULTURAL RESOURCES, INCLUDING FEDERAL OR STATE HISTORIC OR HERITAGE SITES OR NATIVE AMERICAN RELIGIOUS SITES

There are no known important cultural resources adjacent to the site.

XII. NATURAL RESOURCES, INCLUDING PROXIMITY OF THE SITE TO IMPORTANT FEDERAL, STATE OR LOCAL NATURAL RESOURCES, INCLUDING WATERWAYS, WILDLIFE REFUGES, WETLANDS, OR CRITICAL HABITATS OF ENDANGERED OR THREATENED SPECIES;

The site is not adjacent to known Federal, State or Local wildlife refuges, wetlands or critical habitats.

XIII. POTENTIAL VULNERABILITY OF GROUNDWATER TO CONTAMINATION THAT MIGHT MIGRATE FROM THE SITE, INCLUDING PROXIMITY TO WELLHEAD PROTECTION AND GROUNDWATER RECHARGE AREAS AND OTHER AREAS IDENTIFIED BY THE STATE COMPREHENSIVE GROUNDWATER REMEDIATION AND PROTECTION PROGRAM

The site and adjacent properties are serviced by a public water supply. There are no known downgradient public wellheads or groundwater recharge areas.

XIV. PROXIMITY TO FLOODPLAINS

The site is not adjacent to floodplains.

XV. GEOGRAPHY AND GEOLOGY

- A. The western portion of the subject property is relatively flat, and the ground surface consists of concrete and gravel, while the eastern half of the site is vegetated and contains clusters of small trees. In addition, the western portion of the site is characterized by a hummocky terrain indicative of disturbed ground that may be associated with on-site disposal activities. The site presumably drains from north to south towards the Canal which forms the southern site boundary.

The subject parcel is bordered to the north by Luquer Street, with a vacant lot and an automotive repair facility located on the opposite side of the street. The eastern portion of the site is bordered by remnants of Canal Street and railroad tracks, while the New York Barge Canal forms the southern site boundary. The western side is bound by Lawrence Street, which dead ends before the Erie Canal. (The bridge that historically carried Lawrence Street across the canal has been removed; Lawrence Street continues on the south side of the Erie Canal).

- B. The site is located in the Hudson-Mohawk Lowland, which exhibits low elevation and relief. The United States Department of Agriculture's (USDA) Soil Survey for Oneida County maps this area of Lawrence Street as Canandaigua silt loam. The Canandaigua silt loam parent material is described as silty and clayey glaciolacustrine deposits. According to the New York State Museum (NYSM) Surficial Geologic Map of New York, the surficial geology at the site area is lacustrine sand – sand deposits associated with large bodies of water, generally a near-shore deposit, well sorted, and stratified. Bedrock at the site is mapped by the NYS Museum and Science Service's Geologic Map of New York (1970) as the Ordovician-age Utica Shale that has been exposed by the southward and westward stripping of the overlying Silurian and Devonian limestone.

The subsurface investigation revealed mixed fill consisting of gravel and asphalt debris with 0- to 3-feet of topsoil with increasing thickness toward the eastern portion of the site. The total depth of fill ranged approximately from 2- to 4-feet below ground surface throughout the site before grading to a silt and clay, which appeared to extend from 1- to 14-ft below grade. The silt and clay unit was underlain by a sand and gravel unit. The uppermost water-bearing zone was typically encountered at a depth between 2.5 and 12.5 feet on the site. Bedrock was not encountered during the subsurface investigation.

XVI. CURRENT INSTITUTIONAL CONTROLS APPLICABLE TO THE SITE

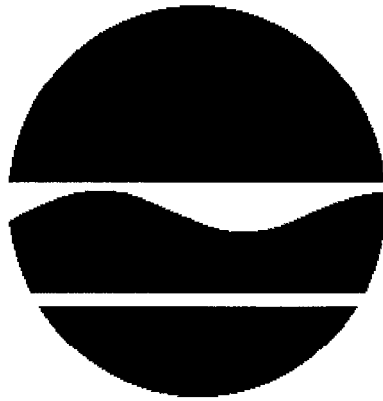
There are no current institutional controls applicable to the site.

Attachment E

**Proposed Remedial Action Plan (PRAP)
for the 701 Lawrence Street Site
Prepared by the New York State Department
of Environmental Conservation (NYSDEC),
Dated December 2016**

PROPOSED REMEDIAL ACTION PLAN

701 Lawrence Street
Operable Unit Number 01: Intersection of Luquer and
Lawrence Streets
Environmental Restoration Project
Rome, Oneida County
Site No. E633063
December 2016



Prepared by
Division of Environmental Remediation
New York State Department of Environmental Conservation

PROPOSED REMEDIAL ACTION PLAN

701 Lawrence Street
Operable Unit 1
Intersection of Luquer and Lawrence Street Rome, Oneida County
Site No. E633063
December 2016

SECTION 1: SUMMARY AND PURPOSE OF THE PROPOSED PLAN

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), is proposing a remedy for the above referenced site. The disposal of contaminants at the site has resulted in threats to public health and the environment that would be addressed by the remedy proposed by this Proposed Remedial Action Plan (PRAP). The disposal of contaminants at this site, as more fully described in Section 6 of this document, has contaminated various environmental media. Contaminants include hazardous waste and/or petroleum. The proposed remedy is intended to attain the remedial action objectives identified for this site for the protection of public health and the environment. This PRAP identifies the preferred remedy, summarizes the other alternatives considered, and discusses the reasons for the preferred remedy.

The 1996 Clean Water/Clean Air Bond Act provides funding to municipalities for the investigation and cleanup of brownfields. Brownfields are abandoned, idled, or under-used properties where redevelopment is complicated by real or perceived environmental contamination. They typically are former industrial or commercial properties where operations may have resulted in environmental contamination. Brownfields often pose not only environmental, but legal and financial burdens on communities. Under the Environmental Restoration Program, the state provides grants to municipalities to reimburse up to 90 percent of eligible costs for site investigation and remediation activities. Once remediated, the property can then be reused.

The Department has issued this document in accordance with the requirements of New York State Environmental Conservation Law and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York; (6 NYCRR) Part 375. This document is a summary of the information that can be found in the site-related reports and documents in the document repositories identified below.

SECTION 2: CITIZEN PARTICIPATION

The Department seeks input from the community on all PRAPs. This is an opportunity for public participation in the remedy selection process. The public is encouraged to review the reports and documents, which are available at the following repositories:

Jervis Public Library
613 North Washington Street
Rome, NY 13440
Phone: 315-336-4570

City of Rome
Attn: Diana Samuels
198 North Washington Street
Rome, NY 13440
Phone: 315-339-7646

A public comment period has been set from:

12/22/2016 to 02/07/2017

A public meeting is scheduled for the following date:

January 19, 2017 at 7:00PM

Public meeting location:

Rome City Hall

At the meeting, the findings of the remedial investigation (RI) and the alternatives analyses (AA) will be presented along with a summary of the proposed remedy. After the presentation, a question-and-answer period will be held, during which verbal or written comments may be submitted on the PRAP.

Written comments may also be sent through 2/07/2017 to:

Salvatore F. Priore, P.E.
NYS Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway 11th Floor
Albany, NY 12233
salvatore.priore@dec.ny.gov

The Department may modify the proposed remedy or select another of the alternatives presented in this PRAP based on new information or public comments. Therefore, the public is encouraged to review and comment on the proposed remedy identified herein. Comments will be summarized and addressed in the responsiveness summary section of the Record of Decision (ROD). The ROD is the Department's final selection of the remedy for this site.

Receive Site Citizen Participation Information By Email

Please note that the Department's Division of Environmental Remediation (DER) is "going

paperless" relative to citizen participation information. The ultimate goal is to distribute citizen participation information about contaminated sites electronically by way of county email listservs. Information will be distributed for all sites that are being investigated and cleaned up in a particular county under the State Superfund Program, Environmental Restoration Program, Brownfield Cleanup Program, Voluntary Cleanup Program, and Resource Conservation and Recovery Act Program. We encourage the public to sign up for one or more county listservs at <http://www.dec.ny.gov/chemical/61092.html>

SECTION 3: SITE DESCRIPTION AND HISTORY

Location: The site is comprised of two parcels divided by the New York State Barge Canal. The parcel to the north of the Barge Canal is located at the intersection of Luquer and Lawrence Streets and comprises 1.85 acres. The parcel to the south of the Barge Canal is located at the intersection of Martin and Lawrence Streets and comprises 1.4 acres.

Site Features: Both parcels are currently vacant with no structures. Forming the southern boundary of the northern parcel (Luquer and Lawrence Street) is the off-site Canalway Trail maintained by the New York State Canal Corporation. The Canalway Trail is a paved walking path with metal railings to prevent entry into the canal and a chain link fence along the southern boundary of the Luquer and Lawrence Streets parcel to prevent access to the site. There are no structures on the Canalway Trail near the site. The Canalway Trail is shown on the attached aerial photograph.

Current Zoning/Use(s): The two properties are zoned for industrial use. The surrounding parcels are also zoned industrial/commercial and include vacant lots, lands owned by the NYS Canal Corporation and an auto repair facility. Some residences are located about 500 north of the site.

Past Use of the Site: Both properties were historically connected by the former Lawrence Street bridge. Prior uses of the site that have led to site contamination were the former bulk fuel and distribution operations as well as several spills that were reported during the property's operational period as a Major Oil Storage Facility.

Operable Units (OUs): The site consists of two OUs. OU-1, the subject of this PRAP is the parcel north of the NYS Barge Canal at the intersection of Luquer and Lawrence Streets. OU-2 is the parcel located south of the Barge Canal at the intersection of Martin and Lawrence Streets. The word "site" in the remainder of this document refers to OU-1 alone.

Site Geology and Hydrogeology: The northern site (OU-1) consists of shallow fill material consisting of gravel and asphalt (ranging from 2 inches to 3 feet in depth), increasing with thickness towards the eastern portion of the site. Below the gravel fill, silt and clay extend from 1-14 feet below grade which is then underlain by sand and gravels to a depth of 22 feet below grade. Groundwater was found between 2.5 and 12.5 feet below grade and flows to the south towards the barge canal. Bedrock was not encountered during the investigation. Further investigation is required at the southern parcel (OU-2) to define the overburden geology and groundwater.

A site location map is attached as Figure 1, the property boundary is the site boundary as shown on Figure 2.

SECTION 4: LAND USE AND PHYSICAL SETTING

The Department may consider the current, intended, and reasonably anticipated future land use of the site and its surroundings when evaluating a remedy for soil remediation. For this site, alternatives (or an alternative) that restrict(s) the use of the site to restricted-residential use (which allows for commercial use and industrial use) as described in Part 375-1.8(g) are/is being evaluated in addition to an alternative which would allow for unrestricted use of the site.

A comparison of the results of the investigation to the appropriate standards, criteria and guidance values (SCGs) for the identified land use and the unrestricted use SCGs for the site contaminants is included in the Tables for the media being evaluated in Exhibit A.

SECTION 5: ENFORCEMENT STATUS

Potentially Responsible Parties (PRPs) are those who may be legally liable for contamination at a site. This may include past or present owners and operators, waste generators, and haulers.

No PRPs have been documented to date.

Since no viable PRPs have been identified, there are currently no ongoing enforcement actions. However, legal action may be initiated at a future date by the state to recover state response costs should PRPs be identified. The City of Rome will assist the State in their efforts by providing all information to the State which identifies Potentially Responsible Parties (PRPs). The City of Rome will also not enter into any agreement regarding response costs without the approval of the Department.

The City of Rome entered into a State Assistance Contract with the Department in 2007. The contract obligates the City to investigate the site and implement a remedy.

SECTION 6: SITE CONTAMINATION

6.1: Summary of the Remedial Investigation

A Remedial Investigation (RI) has been conducted. The purpose of the RI was to define the nature and extent of any contamination resulting from previous activities at the site. The field activities and findings of the investigation are described in the RI Report.

The following general activities are conducted during an RI:

- Research of historical information,
- Geophysical survey to determine the lateral extent of wastes,

- Test pits, soil borings, and monitoring well installations,
- Sampling of waste, surface and subsurface soils, groundwater, and soil vapor,
- Sampling of surface water and sediment,
- Ecological and Human Health Exposure Assessments.

The analytical data collected on this site includes data for:

- groundwater
- soil

6.1.1: Standards, Criteria, and Guidance (SCGs)

The remedy must conform to promulgated standards and criteria that are directly applicable or that are relevant and appropriate. The selection of a remedy must also take into consideration guidance, as appropriate. Standards, Criteria and Guidance are hereafter called SCGs.

To determine whether the contaminants identified in various media are present at levels of concern, the data from the RI were compared to media-specific SCGs. The Department has developed SCGs for groundwater, surface water, sediments, and soil. The NYSDOH has developed SCGs for drinking water and soil vapor intrusion. The tables found in Exhibit A list the applicable SCGs in the footnotes. For a full listing of all SCGs see: <http://www.dec.ny.gov/regulations/61794.html>

6.1.2: RI Results

The data have identified contaminants of concern. A "contaminant of concern" is a contaminant that is sufficiently present in frequency and concentration in the environment to require evaluation for remedial action. Not all contaminants identified on the property are contaminants of concern. The nature and extent of contamination and environmental media requiring action are summarized in Exhibit A. Additionally, the RI Report contains a full discussion of the data. The contaminants of concern identified for this Operable Unit at this site are:

Chromium	Xylene
Nickel	Ethylbenzene
Lead	Tentatively identified compounds (TICs)
Zinc	associated with weathered petroleum
Copper	products
Acetone	

As illustrated in Exhibit A, the contaminants of concern exceed the applicable SCGs for unrestricted use but do not exceed the SCGs for restricted residential use for:

- soil

6.2: Interim Remedial Measures

An interim remedial measure (IRM) is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before issuance of the Record of Decision.

The following IRM(s) has/have been completed at this site based on conditions observed during the RI.

Source Removal at the Intersection of Luquer and Lawrence Streets

An IRM was completed which included the removal of waste materials, a building, above-ground and underground tanks and soils. The IRM Completion Report was approved in March 2012.

The IRM was conducted in three phases. The first phase involved the removal of asbestos and lead paint from the former on-site building and was performed in January-February 2009. The second phase consisted of removing four 275 gallon above-ground storage tanks, a 4000 gallon mobile fueling tank, fourteen 55 gallon drums of petroleum products and miscellaneous wastes, followed by demolition of the building. The building was approximately 7,450 square feet in size and built of brick, concrete and wood. This work was accomplished in June-August 2009. The third phase included the removal of two on-site underground storage tanks (a 1000 gallon gasoline tank and a 2000 gallon fuel oil tank), a stormwater oil/water separator unit which was located off-site to the south on Canal Corporation property, and underground piping. These removal actions also included removal and off-site disposal of 730 tons of contaminated soils in the immediate area of the tanks and piping, followed by confirmatory soil sampling. The work was done from October-November 2009.

Confirmation soil samples taken after these actions found acetone ranging from non-detectable (ND) up to 0.081 parts per million (ppm), xylene (ND - 1 ppm) and ethylbenzene (ND - 1.7 ppm) and metals such as chromium (13.5 – 22 ppm) and nickel (ND - 38 ppm) were slightly above the unrestricted soil cleanup objectives (SCOs) but below the residential soil cleanup objectives (SCOs). No other constituents were detected above the unrestricted use SCO. However, several tentatively identified compounds (TICs) were noted in the subsurface soil, and visual and olfactory observation of 'weathered petroleum' were observed in the subsurface soils

Confirmation samples are included in Exhibit A.

6.3: Summary of Environmental Assessment

This section summarizes the assessment of existing and potential future environmental impacts presented by the site. Environmental impacts may include existing and potential future exposure pathways to fish and wildlife receptors, wetlands, groundwater resources, and surface water.

Based upon the resources and pathways identified and the toxicity of the contaminants of ecological concern at this site, a Fish and Wildlife Resources Impact Analysis (FWRIA) was deemed not necessary for OU-1.

Nature and Extent of Contamination: Environmental concerns at OU-1 result from the site's former use as Major Oil Storage Facility. Several petroleum spills have been documented at the site. Groundwater sampling results for the period of March 1992 through July 1995 revealed that contaminants representative of lubrication oil, gasoline, kerosene, and fuel oil were detected in the on-site groundwater. Monitoring wells installed as part of the site assessment were reportedly abandoned in 1997. Soil and groundwater were analyzed for volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs), metals, and PCB/pesticides.

Surface Soil - On-site shallow soils were sampled from 4-10 inches below ground surface. The near-surface material was very gravelly, which resulted in samples being taken slightly deeper than the recommended depth of 0-2 inches below ground surface for purposes of evaluating potential exposures. The on-site soil contained metals including chromium at a maximum concentration of 23 ppm, lead at a maximum of 244 ppm, zinc at a maximum of 289 ppm and copper at a maximum of 114 ppm. These metals exceed the unrestricted use SCOs but not the restricted residential SCOs. Surface soils had no VOCs, SVOCs, PCBs or other metals which exceeded applicable Part 375 SCOs although TICs for both VOCs and SVOCs were detected. TICs ranged from non-detectable (ND) to 0.277 ppm for VOCs and ND to 7.60 ppm for SVOCs.

Subsurface Soils - Subsurface soils were collected to depths of up to 22 feet. Most samples were collected from 4 to 12 feet based on field screening and visual observation. Soils contained the metals chromium at a maximum concentration of 20 ppm, and nickel at a maximum of 40 ppm and VOCs (acetone 0.088 ppm, ethyl benzene 6.2 ppm and xylene 6 ppm), which exceed the unrestricted SCOs but not the residential SCOs. Although not reflected in the sample results, petroleum contamination in the form of stained soils and odors was apparent in soils observed during test pitting both on and off-site. Soils had no other VOCs, SVOCs, PCBs or other metals which exceeded applicable Part 375 SCOs although TICs for both VOCs and SVOCs were detected. TICs ranged from non-detectable (ND) to 210 ppm for VOCs and ND to 483 ppm for SVOCs.

Off-site, prior to its construction, the area of the Canalway trail was investigated with soil borings and sub-surface soils samples which were analyzed for VOCs, SVOCs and metals. Sample results showed exceedances of unrestricted SCOs for VOCs (acetone at 0.26 ppm) and metals (chromium at 20 ppm and nickel at 30 ppm) and SVOCs in the upper one foot of soils. In the subsurface soil the total detectable VOC concentrations (including TICs) ranged from ND to 1.4 ppm. Total detectable SVOC concentrations (including TICs) in the sub-surface soils ranged from ND to 163 ppm. These levels did not exceed the SCOs for residential use, which includes active recreational use as the Canalway Trail. Approximately one foot of stone aggregate was placed along the path of the trail prior to paving.

Groundwater - Groundwater was tested for VOCs, SVOCs, PCBs and metals, the only exceedances were iron, manganese, and sodium, although these constituents are not believed to be

related to past site operations, but are naturally occurring. Groundwater flow is to the south toward the barge canal. There were no off-site groundwater samples collected.

Soil vapor - The evaluation of the potential for soil vapor intrusion resulting from the presence of site related soil and/or groundwater contamination was not evaluated by quantitative sampling. Field readings with a photoionization detector recorded VOC readings in the range of 3.5 to 1,091 ppm in the on-site soil borings and 1.5 to 330 ppm in the off-site borings. Since there are no structures on-site or on the adjacent Canalway Trail and soil and groundwater sampling showed only minimal VOC impacts, soil vapor was not further evaluated.

Special Resources Impacted/Threatened: The New York State Barge Canal is located between the two parcels. Releases from the sites have the capability of impacting this resource although no observations of contamination have been documented. Further investigation of possible impacts to the canal are anticipated as part of the OU-2 investigation.

6.4: Summary of Human Exposure Pathways

Persons who dig below the ground surface may come into contact with contaminants in subsurface soil. Contaminated groundwater at the site is not used for drinking purposes and the area is served by a public water supply that obtains water from a different source not affected by this contamination. Volatile organic compounds in the groundwater may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Because the site is vacant, the inhalation of site-related contaminants due to soil vapor intrusion does not represent a current concern. However, the potential exists for the inhalation of site contaminants due to soil vapor intrusion for any future on-site development. Sampling indicates soil vapor intrusion is not a concern for off-site buildings.

6.5: Summary of the Remediation Objectives

The objectives for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375. The goal for the remedial program is to restore the site to pre-disposal conditions to the extent feasible. At a minimum, the remedy shall eliminate or mitigate all significant threats to public health and the environment presented by the contamination identified at the site through the proper application of scientific and engineering principles.

The remedial action objectives for this site are:

Groundwater

RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.

RAOs for Environmental Protection

- Remove the source of ground or surface water contamination.

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.

RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater or surface water contamination.

Soil Vapor

RAOs for Public Health Protection

- Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site.

SECTION 7: SUMMARY OF THE PROPOSED REMEDY

To be selected, the remedy must be protective of human health and the environment, be cost-effective, comply with other statutory requirements, and utilize permanent solutions, alternative technologies or resource recovery technologies to the maximum extent practicable. The remedy must also attain the remedial action objectives identified for the site, which are presented in Section 6.5. Potential remedial alternatives for the Site were identified, screened and evaluated in the May 2015 Alternatives Analysis report.

A summary of the remedial alternatives that were considered for this site is presented in Exhibit B. Cost information is presented in the form of present worth, which represents the amount of money invested in the current year that would be sufficient to cover all present and future costs associated with the alternative. This enables the costs of remedial alternatives to be compared on a common basis. As a convention, a time frame of 30 years is used to evaluate present worth costs for alternatives with an indefinite duration. This does not imply that operation, maintenance, or monitoring would cease after 30 years if remediation goals are not achieved. A summary of the Remedial Alternatives Costs is included as Exhibit C.

The basis for the Department's proposed remedy is set forth at Exhibit D.

The proposed remedy is a Soil Cover with Site Management.

The estimated present worth cost to implement the remedy is \$205,130. The cost to construct the remedy is estimated to be \$147,000 and the estimated average annual cost is \$3,000.

The elements of the proposed remedy are as follows:

1. Remedial Design

A remedial design program will be implemented to provide the details necessary for the construction, operation, optimization, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31. The major green remediation components are as follows;

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gases and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
- Maximizing habitat value and creating habitat when possible;
- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals; and
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development.

2. Site Cover

A site cover (Figure 5), consisting of two feet of imported soil will be required to allow for restricted-residential use of the site. The cover will consist either of the structures such as buildings, pavement, sidewalks comprising the site development or a soil cover in areas where the upper two feet of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where a soil cover is required, it will be a minimum of two feet of soil, meeting the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for restricted-residential use. The soil cover will be placed over a demarcation layer, with the upper six inches of the soil of sufficient quality to maintain a vegetation layer. Any fill material brought to the site will meet the requirements for the identified site use as set forth in 6 NYCRR Part 375-6.7(d).

3. Institutional Control

Imposition of an institutional control in the form of an environmental easement for the controlled property that:

- requires the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8(h)(3);
- allows the use and development of the controlled property for restricted-residential, commercial, and industrial uses as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or Oneida County DOH; and
- requires compliance with the Department approved Site Management Plan.

4. Site Management Plan

A Site Management Plan is required, which includes the following:

- a. An Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

Institutional Controls: The Environmental Easement discussed in Paragraph 3 above.

Engineering Controls: The cover system discussed in Paragraph 2 above.

This plan includes, but may not be limited to:

- an Excavation Plan which details the provisions for management of future excavations on the controlled property;
 - a provision, should redevelopment occur, to ensure no soil exceeding protection of groundwater concentrations will remain below storm water retention basin or infiltration structures;
 - descriptions of the provisions of the environmental easement including any land use and groundwater use restrictions;
 - provisions for the management and inspection of the soil cover;
 - a provision for evaluation of the potential for soil vapor intrusion into any future buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion.
 - maintaining site access controls and Department notification;
 - the steps necessary for the periodic reviews and certification of the institutional controls.
- b. a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:
- a schedule of monitoring and frequency of submittals to the Department;
 - monitoring for vapor intrusion for any new buildings developed on the site, as may be required by the Institutional and Engineering Control Plan discussed above.

Exhibit A

Nature and Extent of Contamination

This section describes the findings of the Remedial Investigation for all environmental media that were evaluated. As described in Section 6.1, samples were collected from various environmental media to characterize the nature and extent of contamination.

For each medium for which contamination was identified, a table summarizes the findings of the investigation. The tables present the range of contamination found at the site in the media and compares the data with the applicable SCGs for the site. The contaminants are arranged into four categories: volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), and inorganics (metals and cyanide). For comparison purposes, the SCGs are provided for each medium that allows for unrestricted use. For soil, if applicable, the Restricted Use SCGs identified in Section 4 and Section 6.1.1 are also presented.

Waste/Source Areas

As described in the RI report, waste/source materials were identified at the site and are impacting groundwater, and soil.

Wastes are defined in 6 NYCRR Part 375-1.2(aw) and include solid, industrial and/or hazardous wastes. Source Areas are defined in 6 NYCRR Part 375(au). Source areas are areas of concern at a site where substantial quantities of contaminants are found which can migrate and release significant levels of contaminants to another environmental medium. Wastes and source areas were identified at the site, including impacts to soil from historic petroleum use at the site. The waste/source areas identified at the site, which included; four 275 gallon above-ground storage tanks, a 4000 gallon mobile fueling tank, two underground storage tanks (a 1000 gallon gasoline tank and a 2000 gallon fuel oil tank), fourteen 55 gallon drums of petroleum products, a storm water oil/water separator and underground piping, were addressed by the IRM described in Section 6.2.

Groundwater

Groundwater samples were collected from overburden monitoring wells. The samples were collected to assess groundwater conditions on-site. The results indicate that some commonly found inorganics were detected in shallow groundwater at the site that were above the respective SCGs.

Table 1 - Groundwater

Detected Constituents	Concentration Range Detected	SCG (ppm) ^b	Frequency Exceeding SCG
Inorganics			
Iron	7.73-48.3	0	6 out of 6
Manganese	1.87-6.58	0	6 out of 6
Sodium	55-151	2	6 out of 6

a - ppm: parts per million, which is equivalent to milligrams per liter, mg/L, in water. b- SCG: Standard Criteria or Guidance - Ambient Water Quality Standards and Guidance Values (TOGs 1.1.1), 6 NYCRR Part 703, Surface water and Groundwater Quality Standards, and Part 5 of the New York State Sanitary Code (10 NYCRR Part 5).

The inorganic exceedances shown in the above table are not considered to be associated with the site but are considered artifacts due to the urban environment and the high turbidity in the samples. No site-related groundwater contamination of concern was identified during the RI. Therefore, no remedial alternatives are evaluated for groundwater.

Soil

Table 2 – Shallow Soil

Detected Constituents	Concentration Range (ppm) ^a	Unrestricted Use SCO ^b (ppm)	Frequency Exceeding Unrestricted Use SCO	Restricted Residential Use SCO (ppm) ^c	Frequency Exceeding Restricted SCO
Inorganics					
Chromium	3.75-23.5	1 ^d	7 out of 7	110 ^d	0 out of 7
Lead	3.1-244	63	1 out of 7	400	0 out of 7
Zinc	17.6-289	109	3 out of 7	10,000	0 out of 7
Copper	8.1-114	50	4 out of 7	270	0 out of 7
Organics					
Acetone	ND-0.065	0.05	1 out of 7	100	0 out of 7

a - ppm: parts per million, which is equivalent to milligrams per kilogram, mg/kg, in soil;

b - SCG: Part 375-6.8(a), Unrestricted Soil Cleanup Objectives.

c - SCG: Part 375-6.8(b), Restricted Use Soil Cleanup Objectives for the Protection of Public Health for Restricted Residential Use, unless otherwise noted.

d – Due to lack of chemical speciation for chromium, samples are conservatively compared to the SCO for hexavalent chromium.

ND = Not detected

Shallow soil samples were collected at the site during the RI. Surface soil samples were collected from a depth of 4-10 inches due to the gravelly nature of the site surface. The results indicate that surface soil at the site exceeds the unrestricted SCOs for inorganics but did not exceed the restricted residential SCOs.

Table 3 – Sub-Surface Soil

Detected Constituents	Concentration Range (ppm) ^a	Unrestricted Use SCO ^b (ppm)	Frequency Exceeding Unrestricted Use SCO	Restricted Residential Use SCO (ppm) ^c	Frequency Exceeding Restricted SCO
Inorganics					
Chromium	14.8-20.1	1 ^d	10 out of 11	110 ^d	0 out of 11
Nickel	ND-39.8	30	9 out of 11	310	0 out of 11
Organics					
Acetone	ND-0.088	0.05	4 out of 11	100	0 out of 11
Ethyl benzene	ND-6.2	1	3 out of 11	41	0 out of 11
Xylene	ND-6	0.26	1 out of 11	100	0 out of 11
*VOC TICs	ND-210				
*SVOC TICs	ND-483				

a - ppm: parts per million, which is equivalent to milligrams per kilogram, mg/kg, in soil;

b - SCG: Part 375-6.8(a), Unrestricted Soil Cleanup Objectives.

Table 5 – IRM Confirmation Soil Sample Results

Detected Constituents	Concentration Range (ppm) ^a	Unrestricted Use SCO ^b (ppm)	Frequency Exceeding Unrestricted Use SCO	Residential Use SCO (ppm)	Frequency Exceeding Residential SCO
Inorganics					
Chromium	13.5-22	1 ^d	7 out of 7	22 ^d	1 out of 7
Nickel	ND-37.7	30	2 out of 7	140	0 out of 7
Organics					
Acetone	ND-0.081	0.05	5 out of 7	100	0 out of 7
Xylene	ND-1	0.26	1 out of 7	100	0 out of 7
Ethylbenzene	ND-1.7	1	1 out of 7	30	0 out of 7

d – Due to lack of chemical speciation for chromium, samples are conservatively compared to the SCO for hexavalent chromium.

Note - PCBs were detected in the soil samples but were all below unrestricted SCOs.

The confirmation sample with a detection of xylene and ethylbenzene was a sample located below the former oil/storm water separator at a depth of 11 feet. Further excavation during the IRM was precluded because of potential stability issues in the adjacent canal wall.

Based on the findings of the Remedial Investigation and the confirmation subsurface soil results collected during the IRM, the presence of petroleum products from past operations has resulted in the contamination of site soil. The site contaminants identified in soil which are considered to be the primary contaminants of concern are metals and petroleum constituents. The source removal IRM conducted in 2009 considerably reduced the amount of contamination in the subsurface, and removed all source material. No additional remediation of subsurface soil is necessary. Remaining soil contamination will be addressed in the remedy selection process.

Soil Vapor

The evaluation of the potential for soil vapor intrusion resulting from the presence of site related soil or groundwater contamination was not evaluated by quantitative sampling. Field readings with a photoionization detector recorded VOC readings in the range of 3.5 to 1,091 ppm in the on-site soil borings and 1.5 to 330 ppm in the off-site borings. Since there are no structures on-site or on the adjacent Canalway Trail and soil and groundwater sampling showed only minimal VOC impacts, soil vapor was not further evaluated.

Soil vapor contamination for future development will be addressed in the remedy selection process.

Exhibit B

Description of Remedial Alternatives

The following alternatives were considered based on the remedial action objectives (see Section 6.5) to address the contaminated media identified at the site as described in Exhibit A.

Alternative 1: No Further Action

The No Further Action Alternative recognizes the remediation of the site completed by the IRM(s) described in Section 6.2. This alternative leaves the site in its present condition and does not provide any additional protection of the environment or public health.

Alternative 2: Soil Cover with Institutional Controls

This alternative would include, a site cover to allow for restricted residential use of the site. The cover will consist either of structures such as buildings, pavement, sidewalks comprising the site development or a soil cover in areas where the upper two feet of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where the soil cover is required it will be a minimum of two feet of soil, meeting the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for restricted residential use. The soil cover will be placed over a demarcation layer, with the upper six inches of the soil of sufficient quality to maintain a vegetation layer. Any fill material brought to the site will meet the requirements for the identified site use as set forth in 6 NYCRR Part 375-6.7(d). This alternative also included the implementation of an institutional control in the form of an environmental easement and associated site management plan for the entire OU-1 area to prevent potential exposure to groundwater, limit use to restricted residential and ensure that the soil cover is properly maintained and contaminated soil remaining at the site is properly managed.

Present Worth: \$205,000

Capital Cost: \$147,000

Annual Costs: \$3,000

Alternative 3: Soil Excavation and Off-Site Disposal

This alternative achieves all of the SCGs discussed in Section 6.1.1 and Exhibit A, and would result in soil meeting the unrestricted soil cleanup objectives listed in Part 375-6.8 (a). This alternative would include: excavation and off-site disposal of all soil contamination above the unrestricted soil cleanup objectives, estimated to be 44,770 cubic yards. The remedy would not rely on institutional or engineering controls to prevent future exposure. There is no Site Management, no restrictions, and no periodic review. This remedy will have no annual cost, only the capital cost.

Present Worth: \$6,667,000

Capital Cost: \$4,789,000

Annual Costs: \$3,000

Exhibit C

Remedial Alternative Costs

Remedial Alternative	Capital Cost (\$)	Annual Costs (\$)	Total Present Worth (\$)
No Action	0	0	0
Soil Cover with Institutional Controls	147,000	3,000	205,000
Soil Excavation and Off-Site Disposal	4,789,000	3,000	6,667,000

Exhibit D

SUMMARY OF THE PROPOSED REMEDY

The Department is proposing Alternative 2, Soil cover with institutional controls as the remedy for this site. Alternative 2 would achieve the remediation goals for the site by covering any remaining contaminated soil. This cover in combination with the previous interim remedial action which removed the main sources of contamination and the placement of an environmental easement on the site will effectively protect human health and the environment. The elements of this remedy are described in Section 7. The proposed remedy is depicted in Figure 5.

Basis for Selection

The proposed remedy is based on the results of the RI and the evaluation of alternatives. The criteria to which potential remedial alternatives are compared are defined in 6 NYCRR Part 375. A detailed discussion of the evaluation criteria and comparative analysis is included in the AA report.

The first two evaluation criteria are termed "threshold criteria" and must be satisfied in order for an alternative to be considered for selection.

1. Protection of Human Health and the Environment. This criterion is an overall evaluation of each alternative's ability to protect public health and the environment.

Alternative 1 (No Action) does not provide any protection to public health and the environment and will not be evaluated further.

The proposed remedy (Alternative 2) would satisfy this criterion by covering the contaminated subsurface soils. Alternative 2 relies on a restriction of groundwater use at the site to protect public health. Soil vapor issues will be addressed by Alternative 2 when any new structures are constructed at the site.

Alternative 3, by removing all soil contaminated above the unrestricted soil cleanup objective, meets the criteria. Alternative 3 may require a short-term restriction on groundwater use; however, it is expected the restriction may be able to be removed in approximately three years. Soil vapor contamination is expected to be addressed through the removal of all contaminated on-site soils by Alternative 3.

2. Compliance with New York State Standards, Criteria, and Guidance (SCGs). Compliance with SCGs addresses whether a remedy will meet environmental laws, regulations, and other standards and criteria. In addition, this criterion includes the consideration of guidance which the Department has determined to be applicable on a case-specific basis.

Alternative 2 complies with SCGs to the extent practicable. It addressed source areas of contamination by the IRM, and complies with the restricted use soil cleanup objectives at the surface through construction of a cover system. It also creates the conditions necessary to restore

groundwater quality in time. Because Alternatives 2 and 3 satisfy the threshold criteria, the remaining criteria are particularly important in selecting a final remedy for the site. It is expected Alternative 3 will achieve groundwater SCGs in less than 5 years, while groundwater contamination above SCGs will remain on-site under Alternative 2 for many years.

The next six "primary balancing criteria" are used to compare the positive and negative aspects of each of the remedial strategies.

3. Long-term Effectiveness and Permanence. This criterion evaluates the long-term effectiveness of the remedial alternatives after implementation. If wastes or treated residuals remain on-site after the selected remedy has been implemented, the following items are evaluated: 1) the magnitude of the remaining risks, 2) the adequacy of the engineering and/or institutional controls intended to limit the risk, and 3) the reliability of these controls.

Long-term effectiveness is best accomplished by those alternatives involving excavation of the contaminated overburden soils (Alternative 3). Alternative 3 results in removal of almost all of the chemical contamination at the site and removes the need for property use restrictions and long-term monitoring. Alternative 2 creates a barrier, but it also requires an environmental easement, a groundwater use restriction, actions to address the potential for soil vapor intrusion and long-term monitoring in order to be effective. However the incremental benefit for Alternative 3 is offset by the high cost.

4. Reduction of Toxicity, Mobility or Volume. Preference is given to alternatives that permanently and significantly reduce the toxicity, mobility or volume of the wastes at the site.

Alternative 2 would control potential exposures with institutional controls only and will not reduce the toxicity, mobility or volume of contaminants remaining. Alternative 3, excavation and off-site disposal, reduces the toxicity, mobility and volume of on-site waste by transferring the material to an approved off-site location, and would entail the excavation of 44,770 cubic yards of material. However, the incremental benefit for Alternative 3 is offset by the high cost.

5. Short-term Impacts and Effectiveness. The potential short-term adverse impacts of the remedial action upon the community, the workers, and the environment during the construction and/or implementation are evaluated. The length of time needed to achieve the remedial objectives is also estimated and compared against the other alternatives.

Alternatives 2 and 3 both have short-term impacts which could be controlled, however, Alternative 2 would have the smallest impact. Alternative 3 would have a much greater impact due to the traffic and potential odor releases associated with excavation of a large volume of soil with residual petroleum impacts. The time needed to achieve the remediation goals is the shortest for Alternative 2 (2 months) and longer for Alternative 3 (4 months).

6. Implementability. The technical and administrative feasibility of implementing each alternative are evaluated. Technical feasibility includes the difficulties associated with the construction of the remedy and the ability to monitor its effectiveness. For administrative feasibility, the availability of the necessary personnel and materials is evaluated along with potential difficulties in obtaining

specific operating approvals, access for construction, institutional controls, and so forth.

Alternative 2 is favorable in that it is readily implementable. Alternative 3 is also implementable but much more difficult since excavation and would entail digging below the water table in close proximity to the Barge Canal and local roadways. The volume of soil excavated under this alternative would necessitate increased truck traffic on local roads for four months.

7. Cost-Effectiveness. Capital costs and annual operation, maintenance, and monitoring costs are estimated for each alternative and compared on a present worth basis. Although cost-effectiveness is the last balancing criterion evaluated, where two or more alternatives have met the requirements of the other criteria, it can be used as the basis for the final decision.

The costs of the alternatives vary significantly. Alternative 2 has a low cost (\$205,000), but the contaminated soil would require long-term management using institutional controls. With its large volume of soil to be handled, Alternative 3 (excavation and off-site disposal) would have the highest capital cost (\$6,667,000). The long-term maintenance cost of the capped area with Alternative 2 would be higher than long-term maintenance under Alternative 3. However, the incremental benefit for Alternative 3 is offset by the high cost.

8. Land Use. When cleanup to pre-disposal conditions is determined to be infeasible, the Department may consider the current, intended, and reasonable anticipated future land use of the site and its surroundings in the selection of the soil remedy.

Since the anticipated use of the site is restricted residential, Alternative 2 would comply with this criterion by providing a site cover that is consistent with such use. Alternative 3 would remove the contaminated soil permanently and would make restrictions on the site use unnecessary.

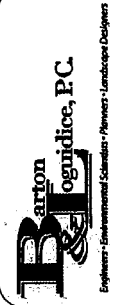
The final criterion, Community Acceptance, is considered a "modifying criterion" and is taken into account after evaluating those above. It is evaluated after public comments on the Proposed Remedial Action Plan have been received.

9. Community Acceptance. Concerns of the community regarding the investigation, the evaluation of alternatives, and the PRAP are evaluated. A responsiveness summary will be prepared that describes public comments received and the manner in which the Department will address the concerns raised. If the selected remedy differs significantly from the proposed remedy, notices to the public will be issued describing the differences and reasons for the changes.

Alternative 2 is being proposed because, as described above, it satisfies the threshold criteria and provides the best balance of the balancing criterion.



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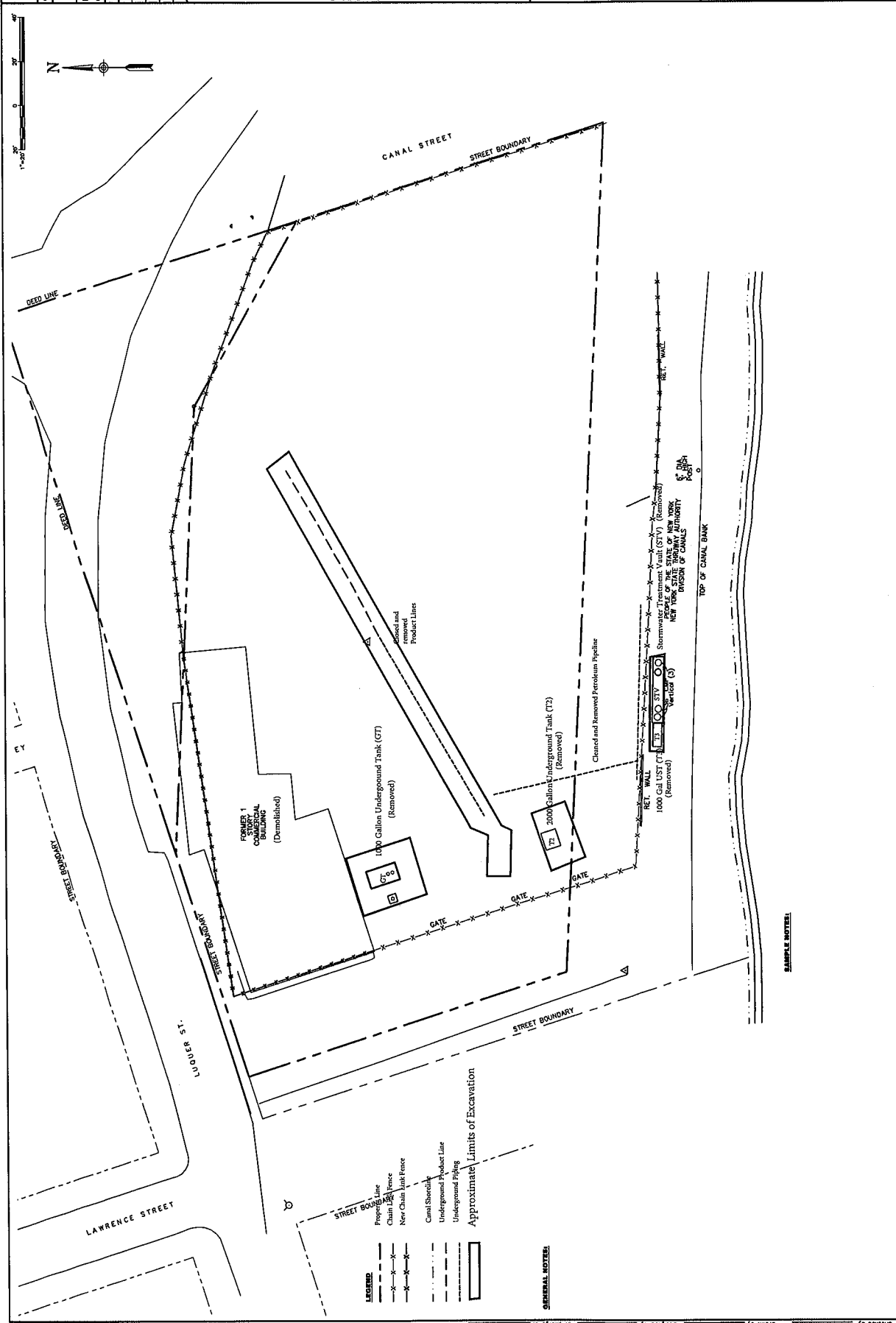


CITY OF ROME
INVESTIGATION OF ENVIRONMENTAL
RESTORATION PROGRAM SITES

LAWRENCE STREET SITE

CITY OF ROME ONEIDA COUNTY, NEW YORK

FIGURE
1





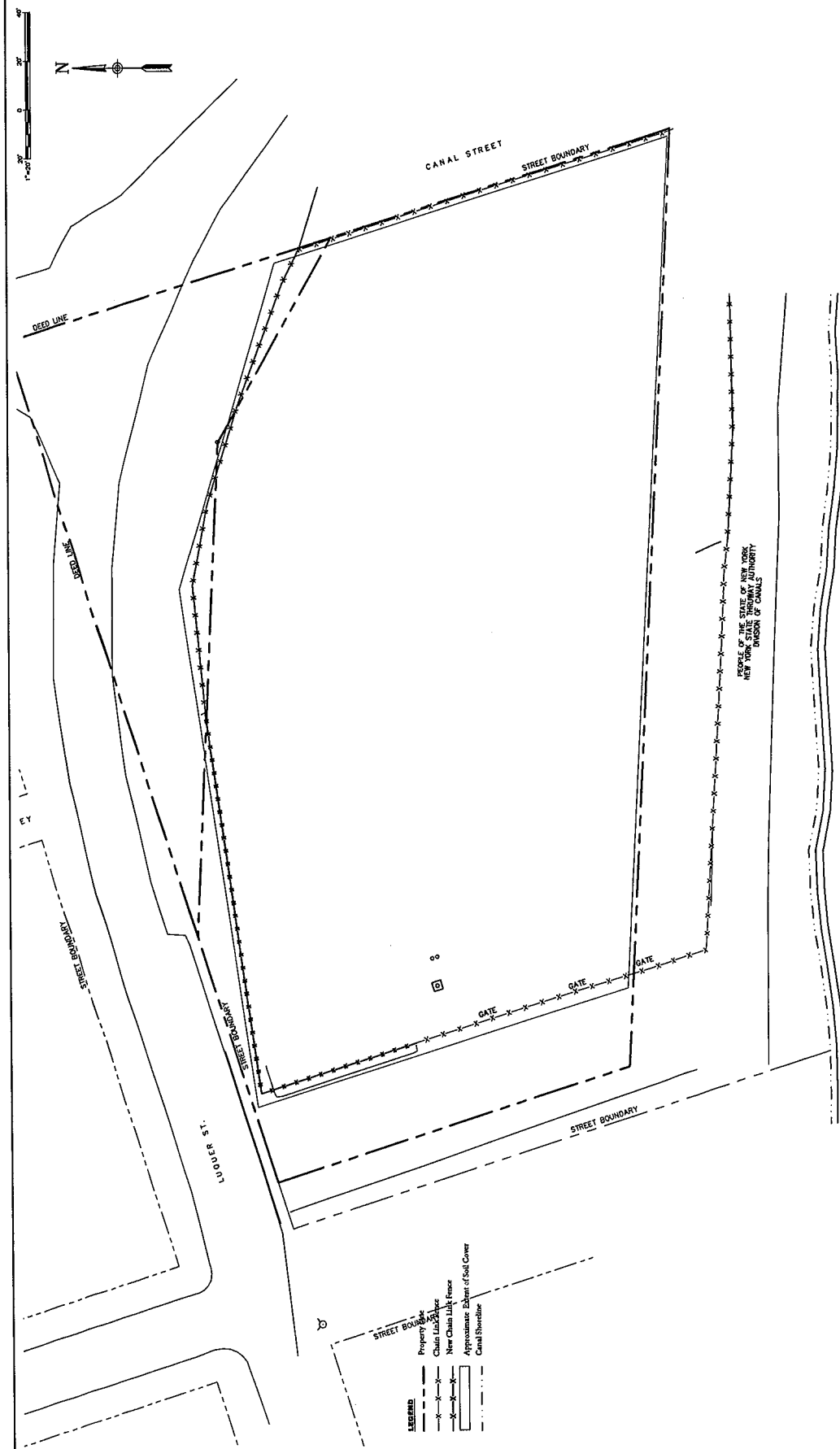
Canalway Trail

Figure 4

© 2016 Google

Google earth

Imagery Date: 5/13/2015 43°12'07.46" N 75°27'22.20" W elev 432 ft eye alt 995 ft

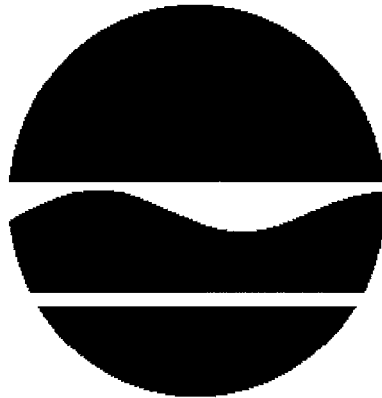


Attachment F

**Record of Decision (ROD)
Issued by the NYSDEC for the
701 Lawrence Street Site
Dated February 2017**

RECORD OF DECISION

701 Lawrence Street
Operable Unit Number 01: Intersection of Luquer and
Lawrence Streets
Environmental Restoration Project
Rome, Oneida County
Site No. E633063
February 2017



Prepared by
Division of Environmental Remediation
New York State Department of Environmental Conservation

DECLARATION STATEMENT - RECORD OF DECISION

701 Lawrence Street
Operable Unit Number: 01
Environmental Restoration Project
Rome, Oneida County
Site No. E633063
February 2017

Statement of Purpose and Basis

This document presents the remedy for Operable Unit Number: 01: Intersection of Luquer and Lawrence Streets of the 701 Lawrence Street site, an environmental restoration site. The remedial program was chosen in accordance with the New York State Environmental Conservation Law and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR) Part 375.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for Operable Unit Number: 01 of the 701 Lawrence Street site and the public's input to the proposed remedy presented by the Department. A listing of the documents included as a part of the Administrative Record is included in Appendix B of the ROD.

Description of Selected Remedy

The elements of the selected remedy are as follows:

1. Remedial Design

A remedial design program will be implemented to provide the details necessary for the construction, operation, optimization, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31. The major green remediation components are as follows;

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gases and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
- Maximizing habitat value and creating habitat when possible;
- Fostering green and healthy communities and working landscapes which balance

- ecological, economic and social goals; and
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development.

2. Site Cover

A site cover (Figure 5), consisting of two feet of imported soil will be required to allow for restricted-residential use of the site. The cover will consist either of the structures such as buildings, pavement, sidewalks comprising the site development or a soil cover in areas where the upper two feet of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where a soil cover is required, it will be a minimum of two feet of soil, meeting the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for restricted-residential use. The soil cover will be placed over a demarcation layer, with the upper six inches of the soil of sufficient quality to maintain a vegetation layer. Any fill material brought to the site will meet the requirements for the identified site use as set forth in 6 NYCRR Part 375-6.7(d).

3. Institutional Control

Imposition of an institutional control in the form of an environmental easement for the controlled property that:

- requires the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
- allows the use and development of the controlled property for restricted-residential, commercial, and industrial uses as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or Oneida County DOH; and
- requires compliance with the Department approved Site Management Plan.

4. Site Management Plan

A Site Management Plan is required, which includes the following:

- An Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

Institutional Controls: The Environmental Easement discussed in Paragraph 3 above.

Engineering Controls: The cover system discussed in Paragraph 2 above.

This plan includes, but may not be limited to:

- an Excavation Plan which details the provisions for management of future excavations on

- the controlled property;
 - a provision, should redevelopment occur, to ensure no soil exceeding protection of groundwater concentrations will remain below storm water retention basin or infiltration structures;
 - descriptions of the provisions of the environmental easement including any land use and groundwater use restrictions;
 - provisions for the management and inspection of the soil cover;
 - a provision for evaluation of the potential for soil vapor intrusion into any future buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion.
 - maintaining site access controls and Department notification;
 - the steps necessary for the periodic reviews and certification of the institutional controls.
- b. a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:
- a schedule of monitoring and frequency of submittals to the Department;
 - monitoring for vapor intrusion for any new buildings developed on the site, as may be required by the Institutional and Engineering Control Plan discussed above.

New York State Department of Health Acceptance

The New York State Department of Health (NYSDOH) concurs that the remedy for this site is protective of human health.

Declaration

The selected remedy is protective of human health and the environment, complies with State and Federal requirements that are legally applicable or relevant and appropriate to the remedial action to the extent practicable, and is cost effective. This remedy utilizes permanent solutions and alternative treatment or resource recovery technologies, to the maximum extent practicable, and satisfies the preference for remedies that reduce toxicity, mobility, or volume as a principal element.

February 15, 2017

Date



Robert W. Schick, P.E., Director
Division of Environmental Remediation

RECORD OF DECISION

701 Lawrence Street
Operable Unit Number: 01
Rome, Oneida County
Site No. E633063
February 2017

SECTION 1: SUMMARY AND PURPOSE

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), has selected a remedy for the above referenced site. The disposal of contaminants at the site has resulted in threats to public health and the environment that would be addressed by the remedy. The disposal or release of contaminants at this site, as more fully described in this document, has contaminated various environmental media. Contaminants include hazardous waste and/or petroleum. The remedy is intended to attain the remedial action objectives identified for this site for the protection of public health and the environment. This Record of Decision (ROD) identifies the selected remedy, summarizes the other alternatives considered, and discusses the reasons for selecting the remedy.

The 1996 Clean Water/ Clean Air Bond Act provides funding to municipalities for the investigation and cleanup of brownfields. Brownfields are abandoned, idled, or under-used properties where redevelopment is complicated by real or perceived environmental contamination. They typically are former industrial or commercial properties where operations may have resulted in environmental contamination. Brownfields often pose not only environmental, but legal and financial burdens on communities. Under the Environmental Restoration Program, the state provides grants to municipalities to reimburse up to 90 percent of eligible costs for site investigation and remediation activities. Once remediated, the property can then be reused.

The Department has issued this document in accordance with the requirements of New York State Environmental Conservation Law and 6 NYCRR Part 375. This document is a summary of the information that can be found in the site-related reports and documents.

SECTION 2: CITIZEN PARTICIPATION

The Department seeks input from the community on all remedies. A public comment period was held, during which the public was encouraged to submit comment on the proposed remedy. All comments on the remedy received during the comment period were considered by the Department in selecting a remedy for the site. Site-related reports and documents were made available for review by the public at the following document repositories:

Jervis Public Library
613 North Washington Street
Rome, NY 13440
Phone: 315-336-4570

City of Rome
Attn: Diana Samuels
198 North Washington Street
Rome, NY 13440
Phone: 315-339-7646

A public meeting on January 19, 2017 was also conducted. At the meeting, the findings of the remedial investigation (RI) and the alternatives analyses (AA) were presented along with a summary of the proposed remedy. After the presentation, a question-and-answer period was held, during which verbal or written comments were accepted on the proposed remedy.

Comments on the remedy received during the comment period are summarized and addressed in the responsiveness summary section of the ROD.

Receive Site Citizen Participation Information By Email

Please note that the Department's Division of Environmental Remediation (DER) is "going paperless" relative to citizen participation information. The ultimate goal is to distribute citizen participation information about contaminated sites electronically by way of county email listservs. Information will be distributed for all sites that are being investigated and cleaned up in a particular county under the State Superfund Program, Environmental Restoration Program, Brownfield Cleanup Program, Voluntary Cleanup Program, and Resource Conservation and Recovery Act Program. We encourage the public to sign up for one or more county listservs at <http://www.dec.ny.gov/chemical/61092.html>

SECTION 3: SITE DESCRIPTION AND HISTORY

Location: The site is comprised of two parcels divided by the New York State Barge Canal. The parcel to the north of the Barge Canal is located at the intersection of Luquer and Lawrence Streets and comprises 1.85 acres. The parcel to the south of the Barge Canal is located at the intersection of Martin and Lawrence Streets and comprises 1.4 acres.

Site Features: Both parcels are currently vacant with no structures. Forming the southern boundary of the northern parcel (Luquer and Lawrence Street) is the off-site Canalway Trail maintained by the New York State Canal Corporation. The Canalway Trail is a paved walking path with metal railings to prevent entry into the canal and a chain link fence along the southern boundary of the Luquer and Lawrence Streets parcel to prevent access to the site. There are no structures on the Canalway Trail near the site. The Canalway Trail is shown on the attached aerial photograph.

Current Zoning/Use(s): The two properties are zoned for industrial use. The surrounding parcels are also zoned industrial/commercial and include vacant lots, lands owned by the NYS Canal Corporation and an auto repair facility. Some residences are located about 500 north of the site.

Past Use of the Site: Both properties were historically connected by the former Lawrence Street bridge. Prior uses of the site that have led to site contamination were the former bulk fuel and distribution operations as well as several spills that were reported during the property's operational period as a Major Oil Storage Facility.

Operable Units (OUs): The site consists of two OUs. OU-1, the subject of this PRAP is the parcel north of the NYS Barge Canal at the intersection of Luquer and Lawrence Streets. OU-2 is the parcel located south of the Barge Canal at the intersection of Martin and Lawrence Streets. The word "site" in the remainder of this document refers to OU-1 alone.

Site Geology and Hydrogeology: The northern site (OU-1) consists of shallow fill material consisting of gravel and asphalt (ranging from 2 inches to 3 feet in depth), increasing with thickness towards the eastern portion of the site. Below the gravel fill, silt and clay extend from 1-14 feet below grade which is then underlain by sand and gravels to a depth of 22 feet below grade. Groundwater was found between 2.5 and 12.5 feet below grade and flows to the south towards the barge canal. Bedrock was not encountered during the investigation. Further investigation is required at the southern parcel (OU-2) to define the overburden geology and groundwater.

A site location map is attached as Figure 1, the property boundary is the site boundary as shown on Figure 2.

Operable Unit (OU) Number 01 is the subject of this document.

A Record of Decision will be issued for OU 02 in the future.

A site location map is attached as Figure 1.

SECTION 4: LAND USE AND PHYSICAL SETTING

The Department may consider the current, intended, and reasonably anticipated future land use of the site and its surroundings when evaluating a remedy for soil remediation. For this site, alternatives (or an alternative) that restrict(s) the use of the site to restricted-residential use (which allows for commercial use and industrial use) as described in Part 375-1.8(g) were/was evaluated in addition to an alternative which would allow for unrestricted use of the site.

A comparison of the results of the RI to the appropriate standards, criteria and guidance values (SCGs) for the identified land use and the unrestricted use SCGs for the site contaminants is included in the Tables for the media being evaluated in Exhibit A.

SECTION 5: ENFORCEMENT STATUS

Potentially Responsible Parties (PRPs) are those who may be legally liable for contamination at a

site. This may include past or present owners and operators, waste generators, and haulers.

No PRPs have been documented to date.

The City of Rome entered into a State Assistance Contract with the Department in 2007. The contract obligates the City to investigate the site and implement a remedy.

Since no viable PRPs have been identified, there are currently no ongoing enforcement actions. However, legal action may be initiated at a future date by the state to recover state response costs should PRPs be identified. City of Rome will assist the state in its efforts by providing all information to the state which identifies PRPs. City of Rome will also not enter into any agreement regarding response costs without the approval of the Department.

SECTION 6: SITE CONTAMINATION

6.1: Summary of the Remedial Investigation

A Remedial Investigation (RI) has been conducted. The purpose of the RI was to define the nature and extent of any contamination resulting from previous activities at the site. The field activities and findings of the investigation are described in the RI Report.

The following general activities are conducted during an RI:

- Research of historical information,
- Geophysical survey to determine the lateral extent of wastes,
- Test pits, soil borings, and monitoring well installations,
- Sampling of waste, surface and subsurface soils, groundwater, and soil vapor,
- Sampling of surface water and sediment,
- Ecological and Human Health Exposure Assessments.

The analytical data collected on this site includes data for:

- groundwater
- soil
- sediment

6.1.1: Standards, Criteria, and Guidance (SCGs)

The remedy must conform to promulgated standards and criteria that are directly applicable or that

are relevant and appropriate. The selection of a remedy must also take into consideration guidance, as appropriate. Standards, Criteria and Guidance are hereafter called SCGs.

To determine whether the contaminants identified in various media are present at levels of concern, the data from the RI were compared to media-specific SCGs. The Department has developed SCGs for groundwater, surface water, sediments, and soil. The NYSDOH has developed SCGs for drinking water and soil vapor intrusion. The tables found in Exhibit A list the applicable SCGs in the footnotes. For a full listing of all SCGs see: <http://www.dec.ny.gov/regulations/61794.html>

6.1.2: RI Results

The data have identified contaminants of concern. A "contaminant of concern" is a contaminant that is sufficiently present in frequency and concentration in the environment to require evaluation for remedial action. Not all contaminants identified on the property are contaminants of concern. The nature and extent of contamination and environmental media requiring action are summarized in Exhibit A. Additionally, the RI Report contains a full discussion of the data. The contaminant(s) of concern identified for this Operable Unit at this site are:

- Chromium
- Nickel
- Lead
- Zinc
- Copper
- Acetone
- Xylene
- Ethylbenzene
- Tentatively identified compounds (TICs) associated with weathered petroleum products

As illustrated in Exhibit A, the contaminant(s) of concern exceed the applicable SCGs for:

- soil

6.2: Interim Remedial Measures

An interim remedial measure (IRM) is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before issuance of the Record of Decision.

The following IRM(s) has/have been completed at this site based on conditions observed during the RI.

Source Removal Intersection of Luquer and Lawrence Streets

An IRM was completed which included the removal of waste materials, a building, above-ground and underground tanks and soils. The IRM Completion Report was approved in March 2012.

The IRM was conducted in three phases. The first phase involved the removal of asbestos and lead paint from the former on-site building and was performed in January-February 2009. The second phase consisted of removing four 275 gallon above-ground storage tanks, a 4000 gallon mobile fueling tank, fourteen 55 gallon drums of petroleum products and miscellaneous wastes, followed by demolition of the building. The building was approximately 7,450 square feet in size and built of brick, concrete and wood. This work was accomplished in June-August 2009. The third phase included the removal of two on-site underground storage tanks (a 1000 gallon gasoline tank and a 2000 gallon fuel oil tank), a stormwater oil/water separator unit which was located off-site to the south on Canal Corporation property, and underground piping. These removal actions also included removal and off-site disposal of 730 tons of contaminated soils in the immediate area of the tanks and piping, followed by confirmatory soil sampling. The work was done from October-November 2009.

Confirmation soil samples taken after these actions found acetone ranging from non-detectable (ND) up to 0.081 parts per million (ppm), xylene (ND - 1 ppm) and ethylbenzene (ND - 1.7 ppm) and metals such as chromium (13.5 – 22 ppm) and nickel (ND - 38 ppm) were slightly above the unrestricted soil cleanup objectives (SCOs) but below the residential soil cleanup objectives (SCOs). No other constituents were detected above the unrestricted use SCO. However, several tentatively identified compounds (TICs) were noted in the subsurface soil, and visual and olfactory observation of 'weathered petroleum' were observed in the subsurface soils

Confirmation samples are included in Exhibit A.

6.3: Summary of Environmental Assessment

This section summarizes the assessment of existing and potential future environmental impacts presented by the site. Environmental impacts may include existing and potential future exposure pathways to fish and wildlife receptors, wetlands, groundwater resources, and surface water.

Based upon the resources and pathways identified and the toxicity of the contaminants of ecological concern at this site, a Fish and Wildlife Resources Impact Analysis (FWRIA) was deemed not necessary for OU 01.

Nature and Extent of Contamination: Environmental concerns at OU-1 result from the site's former use as Major Oil Storage Facility. Several petroleum spills have been documented at the site. Groundwater sampling results for the period of March 1992 through July 1995 revealed that contaminants representative of lubrication oil, gasoline, kerosene, and fuel oil were detected in the on-site groundwater. Monitoring wells installed as part of the site assessment were reportedly abandoned in 1997. Soil and groundwater were analyzed for volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCS), metals, and PCB/pesticides.

Surface Soil - On-site shallow soils were sampled from 4-10 inches below ground surface. The near-surface material was very gravelly, which resulted in samples being taken slightly deeper than the recommended depth of 0-2 inches below ground surface for purposes of evaluating potential exposures. The on-site soil contained metals including chromium at a maximum concentration of 23 ppm, lead at a maximum of 244 ppm, zinc at a maximum of 289 ppm and copper at a maximum of 114 ppm. These metals exceed the unrestricted use SCOs but not the restricted residential SCOs. Surface soils had no VOCs, SVOCs, PCBs or other metals which exceeded applicable Part 375 SCOs although TICs for both VOCs and SVOCs were detected. TICs ranged from non-detectable (ND) to 0.277 ppm for VOCs and ND to 7.60 ppm for SVOCs.

Subsurface Soils - Subsurface soils were collected to depths of up to 22 feet. Most samples were collected from 4 to 12 feet based on field screening and visual observation. Soils contained the metals chromium at a maximum concentration of 20 ppm, and nickel at a maximum of 40 ppm and VOCs (acetone 0.088 ppm, ethyl benzene 6.2 ppm and xylene 6 ppm), which exceed the unrestricted SCOs but not the residential SCOs. Although not reflected in the sample results, petroleum contamination in the form of stained soils and odors was apparent in soils observed during test pitting both on and off-site. Soils had no other VOCs, SVOCs, PCBs or other metals which exceeded applicable Part 375 SCOs although TICs for both VOCs and SVOCs were detected. TICs ranged from non-detectable (ND) to 210 ppm for VOCs and ND to 483 ppm for SVOCs.

Off-site, prior to its construction, the area of the Canalway trail was investigated with soil borings and sub-surface soils samples which were analyzed for VOCs, SVOCs and metals. Sample results showed exceedances of unrestricted SCOs for VOCs (acetone at 0.26 ppm) and metals (chromium at 20 ppm and nickel at 30 ppm) and SVOCs in the upper one foot of soils. In the subsurface soil the total detectable VOC concentrations (including TICs) ranged from ND to 1.4 ppm. Total detectable SVOC concentrations (including TICs) in the sub-surface soils ranged from ND to 163 ppm. These levels did not exceed the SCOs for residential use, which includes active recreational use as the Canalway Trail. Approximately one foot of stone aggregate was placed along the path of the trail prior to paving.

Groundwater - Groundwater was tested for VOCs, SVOCs, PCBs and metals, the only exceedances were iron, manganese, and sodium, although these constituents are not believed to be related to past site operations, but are naturally occurring. Groundwater flow is to the south toward the barge canal. There were no off-site groundwater samples collected.

Soil vapor - The evaluation of the potential for soil vapor intrusion resulting from the presence of site related soil and/or groundwater contamination was not evaluated by quantitative sampling. Field readings with a photoionization detector recorded VOC readings in the range of 3.5 to 1,091 ppm in the on-site soil borings and 1.5 to 330 ppm in the off-site borings. Since there are no structures on-site or on the adjacent Canalway Trail and soil and groundwater sampling showed only minimal VOC impacts, soil vapor was not further evaluated.

Special Resources Impacted/Threatened: The New York State Barge Canal is located between the two parcels. Releases from the sites have the capability of impacting this resource although no

observations of contamination have been documented. Further investigation of possible impacts to the canal are anticipated as part of the OU-2 investigation.

6.4: Summary of Human Exposure Pathways

This human exposure assessment identifies ways in which people may be exposed to site-related contaminants. Chemicals can enter the body through three major pathways (breathing, touching or swallowing). This is referred to as *exposure*.

Persons who dig below the ground surface may come into contact with contaminants in subsurface soil. Contaminated groundwater at the site is not used for drinking purposes and the area is served by a public water supply that obtains water from a different source not affected by this contamination. Volatile organic compounds in the groundwater may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Because the site is vacant, the inhalation of site-related contaminants due to soil vapor intrusion does not represent a current concern. However, the potential exists for the inhalation of site contaminants due to soil vapor intrusion for any future on-site development. Sampling indicates soil vapor intrusion is not a concern for off-site buildings.

6.5: Summary of the Remediation Objectives

The objectives for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375. The goal for the remedial program is to restore the site to pre-disposal conditions to the extent feasible. At a minimum, the remedy shall eliminate or mitigate all significant threats to public health and the environment presented by the contamination identified at the site through the proper application of scientific and engineering principles.

The remedial action objectives for this site are:

Groundwater

RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.

RAOs for Environmental Protection

- Remove the source of ground or surface water contamination.

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.

RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater or surface water contamination.

Soil Vapor

RAOs for Public Health Protection

- Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site.

SECTION 7: SUMMARY OF THE SELECTED REMEDY

To be selected the remedy must be protective of human health and the environment, be cost-effective, comply with other statutory requirements, and utilize permanent solutions, alternative technologies or resource recovery technologies to the maximum extent practicable. The remedy must also attain the remedial action objectives identified for the site, which are presented in Section 6.5. Potential remedial alternatives for the Site were identified, screened and evaluated in the alternatives analysis (AA) report.

A summary of the remedial alternatives that were considered for this site is presented in Exhibit B. Cost information is presented in the form of present worth, which represents the amount of money invested in the current year that would be sufficient to cover all present and future costs associated with the alternative. This enables the costs of remedial alternatives to be compared on a common basis. As a convention, a time frame of 30 years is used to evaluate present worth costs for alternatives with an indefinite duration. This does not imply that operation, maintenance, or monitoring would cease after 30 years if remediation goals are not achieved. A summary of the Remedial Alternatives Costs is included as Exhibit C.

The basis for the Department's remedy is set forth at Exhibit D.

The selected remedy is referred to as the Soil Cover, Institutional Controls and Site Management remedy.

The estimated present worth cost to implement the remedy is \$205,130. The cost to construct the remedy is estimated to be \$202,130 and the estimated average annual cost is \$3,000.

The elements of the selected remedy are as follows:

1. Remedial Design

A remedial design program will be implemented to provide the details necessary for the construction, operation, optimization, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and site management of the remedy as per DER-31. The major green remediation components are as follows;

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gases and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;

- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
- Maximizing habitat value and creating habitat when possible;
- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals; and
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development.

2. Site Cover

A site cover (Figure 5), consisting of two feet of imported soil will be required to allow for restricted-residential use of the site. The cover will consist either of the structures such as buildings, pavement, sidewalks comprising the site development or a soil cover in areas where the upper two feet of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where a soil cover is required, it will be a minimum of two feet of soil, meeting the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for restricted-residential use. The soil cover will be placed over a demarcation layer, with the upper six inches of the soil of sufficient quality to maintain a vegetation layer. Any fill material brought to the site will meet the requirements for the identified site use as set forth in 6 NYCRR Part 375-6.7(d).

3. Institutional Control

Imposition of an institutional control in the form of an environmental easement for the controlled property that:

- requires the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
- allows the use and development of the controlled property for restricted-residential, commercial, and industrial uses as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or Oneida County DOH; and
- requires compliance with the Department approved Site Management Plan.

4. Site Management Plan

A Site Management Plan is required, which includes the following:

- a. An Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

Institutional Controls: The Environmental Easement discussed in Paragraph 3 above.

Engineering Controls: The cover system discussed in Paragraph 2 above.

This plan includes, but may not be limited to:

- an Excavation Plan which details the provisions for management of future excavations on the controlled property;
 - a provision, should redevelopment occur, to ensure no soil exceeding protection of groundwater concentrations will remain below storm water retention basin or infiltration structures;
 - descriptions of the provisions of the environmental easement including any land use and groundwater use restrictions;
 - provisions for the management and inspection of the soil cover;
 - a provision for evaluation of the potential for soil vapor intrusion into any future buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion.
 - maintaining site access controls and Department notification;
 - the steps necessary for the periodic reviews and certification of the institutional controls.
- b. a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:
- a schedule of monitoring and frequency of submittals to the Department;
 - monitoring for vapor intrusion for any new buildings developed on the site, as may be required by the Institutional and Engineering Control Plan discussed above.

Exhibit A

Nature and Extent of Contamination

This section describes the findings of the Remedial Investigation for all environmental media that were evaluated. As described in Section 6.1, samples were collected from various environmental media to characterize the nature and extent of contamination.

For each medium for which contamination was identified, a table summarizes the findings of the investigation. The tables present the range of contamination found at the site in the media and compares the data with the applicable SCGs for the site. The contaminants are arranged into four categories: volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), and inorganics (metals and cyanide). For comparison purposes, the SCGs are provided for each medium that allows for unrestricted use. For soil, if applicable, the Restricted Use SCGs identified in Section 4 and Section 6.1.1 are also presented.

Waste/Source Areas

As described in the RI report, waste/source materials were identified at the site and are impacting groundwater, and soil.

Wastes are defined in 6 NYCRR Part 375-1.2(aw) and include solid, industrial and/or hazardous wastes. Source Areas are defined in 6 NYCRR Part 375(au). Source areas are areas of concern at a site where substantial quantities of contaminants are found which can migrate and release significant levels of contaminants to another environmental medium. Wastes and source areas were identified at the site, including impacts to soil from historic petroleum use at the site. The waste/source areas identified at the site, which included; four 275 gallon above-ground storage tanks, a 4000 gallon mobile fueling tank, two underground storage tanks (a 1000 gallon gasoline tank and a 2000 gallon fuel oil tank), fourteen 55 gallon drums of petroleum products, a storm water oil/water separator and underground piping, were addressed by the IRM described in Section 6.2.

Groundwater

Groundwater samples were collected from overburden monitoring wells. The samples were collected to assess groundwater conditions on-site. The results indicate that some commonly found inorganics were detected in shallow groundwater at the site that were above the respective SCGs.

Table 1 - Groundwater

Detected Constituents	Concentration Range Detected (ppm) ^a	SCG (ppm) ^b	Frequency Exceeding SCG
Inorganics			
Iron	7.73 - 48.3	0.3	6 out of 6
Manganese	1.87 - 6.58	0.3	6 out of 6
Sodium	55 - 151	20	6 out of 6

a - ppm: parts per million, which is equivalent to milligrams per liter, mg/L, in water.

b - SCG: Standard Criteria or Guidance - Ambient Water Quality Standards and Guidance Values (TOGs 1.1.1), 6 NYCRR Part 703, Surface water and Groundwater Quality Standards, and Part 5 of the New York State Sanitary Code (10 NYCRR Part 5).

The inorganic exceedances shown in the above table are not considered to be associated with the site but are considered artifacts due to the urban environment and the high turbidity in the samples. No site-related groundwater contamination of concern was identified during the RI. Therefore, no remedial alternatives are evaluated for groundwater.

Soil

Table 2 – Shallow Soil

Detected Constituents	Concentration Range (ppm) ^a	Unrestricted Use SCO ^b (ppm)	Frequency Exceeding Unrestricted Use SCO	Restricted Residential Use SCO (ppm) ^c	Frequency Exceeding Restricted SCO
Inorganics					
Chromium	3.75-23.5	1 ^d	7 out of 7	110 ^d	0 out of 7
Lead	3.1-244	63	1 out of 7	400	0 out of 7
Zinc	17.6-289	1093	3 out of 7	10,000	0 out of 7
Copper	8.1-114	50	4 out of 7	270	0 out of 7
Organics					
Acetone	ND-0.065	0.05	1 out of 7	100	0 out of 7

a - ppm: parts per million, which is equivalent to milligrams per kilogram, mg/kg, in soil;

b - SCG: Part 375-6.8(a), Unrestricted Soil Cleanup Objectives.

c - SCG: Part 375-6.8(b), Restricted Use Soil Cleanup Objectives for the Protection of Public Health for Restricted Residential Use, unless otherwise noted.

d – Due to lack of chemical speciation for chromium, samples are conservatively compared to the SCO for hexavalent chromium.

ND = Not detected

Shallow soil samples were collected at the site during the RI. Surface soil samples were collected from a depth of 4-10 inches due to the gravelly nature of the site surface. The results indicate that surface soil at the site exceeds the unrestricted SCO for inorganics but did not exceed the restricted residential SCOs.

Table 3 – Sub-Surface Soil

Detected Constituents	Concentration Range (ppm) ^a	Unrestricted Use SCO ^b (ppm)	Frequency Exceeding Unrestricted Use SCO	Restricted Residential Use SCO (ppm) ^c	Frequency Exceeding Restricted SCO
Inorganics					
Chromium	14.8-20.1	1 ^d	10 out of 11	110 ^d	0 out of 11
Nickel	ND-39.8	30	9 out of 11	310	0 out of 11
Organics					
Acetone	ND-0.088	0.05	4 out of 11	100	0 out of 11
Ethyl benzene	ND-6.2	1	3 out of 11	41	0 out of 11
Xylene	ND-6	0.26	1 out of 11	100	0 out of 11
*VOC TICs	ND-210				
*SVOC TICs	ND-483				

a - ppm: parts per million, which is equivalent to milligrams per kilogram, mg/kg, in soil;

b - SCG: Part 375-6.8(a), Unrestricted Soil Cleanup Objectives.

c - SCG: Part 375-6.8(b), Restricted Use Soil Cleanup Objectives for the Protection of Public Health for Restricted Residential Use, unless otherwise noted.

d – Due to lack of chemical speciation for chromium, samples are conservatively compared to the SCO for hexavalent chromium.

ND = Not detected

* TICs are tentatively identified compounds, in this case most likely breakdown products of petroleum without assigned cleanup values.

Subsurface soil samples were collected from a depth of 2 - 22 feet to assess soil contamination. The results indicate that subsurface soils at the site exceed the unrestricted SCOs for volatile organics and metals. Although not reflected in the sample results, petroleum contamination in the form of stained soils and odors was apparent in soil observed during test pitting both on and off-site. Tentatively identified compounds (TICs) ranged from not detected (ND) to 210 ppm for VOCs and ND to 483 ppm for SVOCs.

Table 4 – Off-Site Soil – Canalway Trail

Detected Constituents	Concentration Range (ppm) ^a	Unrestricted Use SCO ^b (ppm)	Frequency Exceeding Unrestricted Use SCO	Residential Use SCO (ppm)	Frequency Exceeding Residential SCO
Inorganics					
Chromium	8.36-19.6	1 ^d	7 out of 7	22 ^d	0 out of 7
Nickel	ND-30.3	30	1 out of 7	140	0 out of 7
Organics					
Acetone	ND-0.26	0.05	8 out of 12	100	0 out of 12
*VOC TICs	ND-1.4				
*SVOC TICs	ND-163				

a - ppm: parts per million, which is equivalent to milligrams per kilogram, mg/kg, in soil;

b - SCG: Part 375-6.8(a), Unrestricted Soil Cleanup Objectives.

d – Due to lack of chemical speciation for chromium, samples are conservatively compared to the SCO for hexavalent chromium.

ND = Not detected

* TICs are tentatively identified compounds, in this case most likely breakdown products of petroleum without assigned cleanup values.

The results indicate that soils at the site exceed the unrestricted SCOs for VOCs and metals but did not exceed the residential SCOs.

Table 5 – IRM Confirmation Soil Sample Results

Detected Constituents	Concentration Range (ppm) ^a	Unrestricted Use SCO ^b (ppm)	Frequency Exceeding Unrestricted Use SCO	Residential Use SCO (ppm)	Frequency Exceeding Residential SCO
Inorganics					
Chromium	13.5-22	1 ^d	7 out of 7	22 ^d	1 out of 7
Nickel	ND-37.7	30	2 out of 7	140	0 out of 7
Organics					
Acetone	ND-0.081	0.05	5 out of 7	100	0 out of 7
Xylene	ND-1	0.26	1 out of 7	100	0 out of 7
Ethylbenzene	ND-1.7	1	1 out of 7	30	0 out of 7

a - ppm: parts per million, which is equivalent to milligrams per kilogram, mg/kg, in soil;

b - SCG: Part 375- 6.8(a), Unrestricted Soil Cleanup Objectives.

d – Due to lack of chemical speciation for chromium, samples are conservatively compared to the SCO for hexavalent chromium.

ND = Not detected

Note - PCBs were detected in the soil samples but were all below unrestricted SCOs.

The confirmation sample with a detection of xylene and ethylbenzene was a sample located below the former oil/storm water separator at a depth of 11 feet. Further excavation during the IRM was precluded because of potential stability issues in the adjacent canal wall.

Based on the findings of the Remedial Investigation and the confirmation subsurface soil results collected during the IRM, the presence of petroleum products from past operations has resulted in the contamination of site soil. The site contaminants identified in soil which are considered to be the primary contaminants of concern are metals and petroleum constituents. The source removal IRM conducted in 2009 considerably reduced the amount of contamination in the subsurface, and removed all source material. No additional remediation of subsurface soil is necessary. Remaining soil contamination will be addressed in the remedy selection process.

Soil Vapor

The evaluation of the potential for soil vapor intrusion resulting from the presence of site related soil or groundwater contamination was not evaluated by quantitative sampling. Field readings with a photoionization detector recorded VOC readings in the range of 3.5 to 1,091 ppm in the on-site soil borings and 1.5 to 330 ppm in the off-site borings. Since there are no structures on-site or on the adjacent Canalway Trail and soil and groundwater sampling showed only minimal VOC impacts, soil vapor was not further evaluated.

Soil vapor contamination for future development will be addressed in the remedy.

Exhibit B

Description of Remedial Alternatives

The following alternatives were considered based on the remedial action objectives (see Section 6.5) to address the contaminated media identified at the site as described in Exhibit A.

Alternative 1: No Further Action

The No Further Action Alternative recognizes the remediation of the site completed by the IRM(s) described in Section 6.2. This alternative leaves the site in its present condition and does not provide any additional protection of the environment or public health.

Alternative 2: Soil Cover with Institutional Controls

This alternative would include, a site cover to allow for restricted residential use of the site. The cover will consist either of structures such as buildings, pavement, sidewalks comprising the site development or a soil cover in areas where the upper two feet of exposed surface soil will exceed the applicable soil cleanup objectives (SCOs). Where the soil cover is required it will be a minimum of two feet of soil, meeting the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d) for restricted residential use. The soil cover will be placed over a demarcation layer, with the upper six inches of the soil of sufficient quality to maintain a vegetation layer. Any fill material brought to the site will meet the requirements for the identified site use as set forth in 6 NYCRR Part 375-6.7(d). This alternative also included the implementation of an institutional control in the form of an environmental easement and associated site management plan for the entire OU-1 area to prevent potential exposure to groundwater, limit use to restricted residential and ensure that the soil cover is properly maintained and contaminated soil remaining at the site is properly managed.

Present Worth: \$205,000

Capital Cost: \$147,000

Annual Costs: \$3,000

Alternative 3: Soil Excavation and Off-Site Disposal

This alternative achieves all of the SCGs discussed in Section 6.1.1 and Exhibit A, and would result in soil meeting the unrestricted soil cleanup objectives listed in Part 375-6.8 (a). This alternative would include: excavation and off-site disposal of all soil contamination above the unrestricted soil cleanup objectives, estimated to be 44,770 cubic yards. The remedy would not rely on institutional or engineering controls to prevent future exposure. There is no Site Management, no restrictions, and no periodic review. This remedy will have no annual cost, only the capital cost.

Present Worth: \$6,667,000

Capital Cost: \$4,789,000

Annual Costs: \$3,000

Exhibit C**Remedial Alternative Costs**

Remedial Alternative	Capital Cost (\$)	Annual Costs (\$)	Total Present Worth (\$)
No Action	0	0	0
Soil Cover with Institutional Controls	147,000	3,000	205,000
Soil Excavation and Off-Site Disposal	4,789,000	3,000	6,667,000

Exhibit D

SUMMARY OF THE SELECTED REMEDY

The Department has selected Alternative 2, Soil cover with institutional controls as the remedy for this site. Alternative 2 would achieve the remediation goals for the site by covering any remaining contaminated soil. This cover in combination with the previous interim remedial action which removed the main sources of contamination and the placement of an environmental easement on the site will effectively protect human health and the environment. The elements of this remedy are described in Section 7. The selected remedy is depicted in Figure 5.

Basis for Selection

The selected remedy is based on the results of the RI and the evaluation of alternatives. The criteria to which potential remedial alternatives are compared are defined in 6 NYCRR Part 375. A detailed discussion of the evaluation criteria and comparative analysis is included in the AA report.

The first two evaluation criteria are termed "threshold criteria" and must be satisfied in order for an alternative to be considered for selection.

1. Protection of Human Health and the Environment. This criterion is an overall evaluation of each alternative's ability to protect public health and the environment.

Alternative 1 (No Action) does not provide any protection to public health and the environment and will not be evaluated further.

The selected remedy (Alternative 2) would satisfy this criterion by covering the contaminated subsurface soils. Alternative 2 relies on a restriction of groundwater use at the site to protect public health. Soil vapor issues will be addressed by Alternative 2 when any new structures are constructed at the site.

Alternative 3, by removing all soil contaminated above the unrestricted soil cleanup objective, meets the criteria. Alternative 3 may require a short-term restriction on groundwater use; however, it is expected the restriction may be able to be removed in approximately three years. Soil vapor contamination is expected to be addressed through the removal of all contaminated on-site soils by Alternative 3.

2. Compliance with New York State Standards, Criteria, and Guidance (SCGs). Compliance with SCGs addresses whether a remedy will meet environmental laws, regulations, and other standards and criteria. In addition, this criterion includes the consideration of guidance which the Department has determined to be applicable on a case-specific basis.

Alternative 2 complies with SCGs to the extent practicable. It addressed source areas of contamination by the IRM, and complies with the restricted use soil cleanup objectives at the surface through construction of a cover system. It also creates the conditions necessary to restore groundwater quality in time. Because Alternatives 2 and 3 satisfy the threshold criteria, the remaining criteria are particularly important in selecting a final remedy for the site. It is expected Alternative 3 will achieve groundwater SCGs in less than 5 years, while groundwater contamination above SCGs will remain on-site under Alternative 2 for many years.

The next six "primary balancing criteria" are used to compare the positive and negative aspects of each of the remedial strategies.

3. Long-term Effectiveness and Permanence. This criterion evaluates the long-term effectiveness of the remedial alternatives after implementation. If wastes or treated residuals remain on-site after the selected remedy has been implemented, the following items are evaluated: 1) the magnitude of the remaining risks, 2) the adequacy of the engineering and/or institutional controls intended to limit the risk, and 3) the reliability of these controls.

Long-term effectiveness is best accomplished by those alternatives involving excavation of the contaminated overburden soils (Alternative 3). Alternative 3 results in removal of almost all of the chemical contamination at the site and removes the need for property use restrictions and long-term monitoring. Alternative 2 creates a barrier, but it also requires an environmental easement, a groundwater use restriction, actions to address the potential for soil vapor intrusion and long-term monitoring in order to be effective. However the incremental benefit for Alternative 3 is offset by the high cost.

4. Reduction of Toxicity, Mobility or Volume. Preference is given to alternatives that permanently and significantly reduce the toxicity, mobility or volume of the wastes at the site.

Alternative 2 would control potential exposures with institutional controls only and will not reduce the toxicity, mobility or volume of contaminants remaining. Alternative 3, excavation and off-site disposal, reduces the toxicity, mobility and volume of on-site waste by transferring the material to an approved off-site location, and would entail the excavation of 44,770 cubic yards of material. However, the incremental benefit for Alternative 3 is offset by the high cost.

5. Short-term Impacts and Effectiveness. The potential short-term adverse impacts of the remedial action upon the community, the workers, and the environment during the construction and/or implementation are evaluated. The length of time needed to achieve the remedial objectives is also estimated and compared against the other alternatives.

Alternatives 2 and 3 both have short-term impacts which could be controlled, however, Alternative 2 would have the smallest impact. Alternative 3 would have a much greater impact due to the traffic and potential odor releases associated with excavation of a large volume of soil with residual petroleum impacts. The time needed to achieve the remediation goals is the shortest for Alternative 2 (2 months) and longer for Alternative 3 (4 months).

6. Implementability. The technical and administrative feasibility of implementing each alternative are evaluated. Technical feasibility includes the difficulties associated with the construction of the remedy and the ability to monitor its effectiveness. For administrative feasibility, the availability of the necessary personnel and materials is evaluated along with potential difficulties in obtaining specific operating approvals, access for construction, institutional controls, and so forth.

Alternative 2 is favorable in that it is readily implementable. Alternative 3 is also implementable but much more difficult since excavation would entail digging below the water table in close proximity to the Barge Canal and local roadways. The volume of soil excavated under this alternative would necessitate increased truck traffic on local roads for four months.

7. Cost-Effectiveness. Capital costs and annual operation, maintenance, and monitoring costs are estimated for each alternative and compared on a present worth basis. Although cost-effectiveness is the last balancing criterion evaluated, where two or more alternatives have met the requirements of the other criteria, it can be used as the basis for the final decision.

The costs of the alternatives vary significantly. Alternative 2 has a low cost (\$205,000), but the contaminated soil would require long-term management using institutional controls. With its large volume of soil to be handled, Alternative 3 (excavation and off-site disposal) would have the highest capital cost (\$6,667,000). The long-term maintenance cost of the capped area with Alternative 2 would be higher than long-term maintenance under Alternative 3. However, the incremental benefit for Alternative 3 is offset by the high cost.

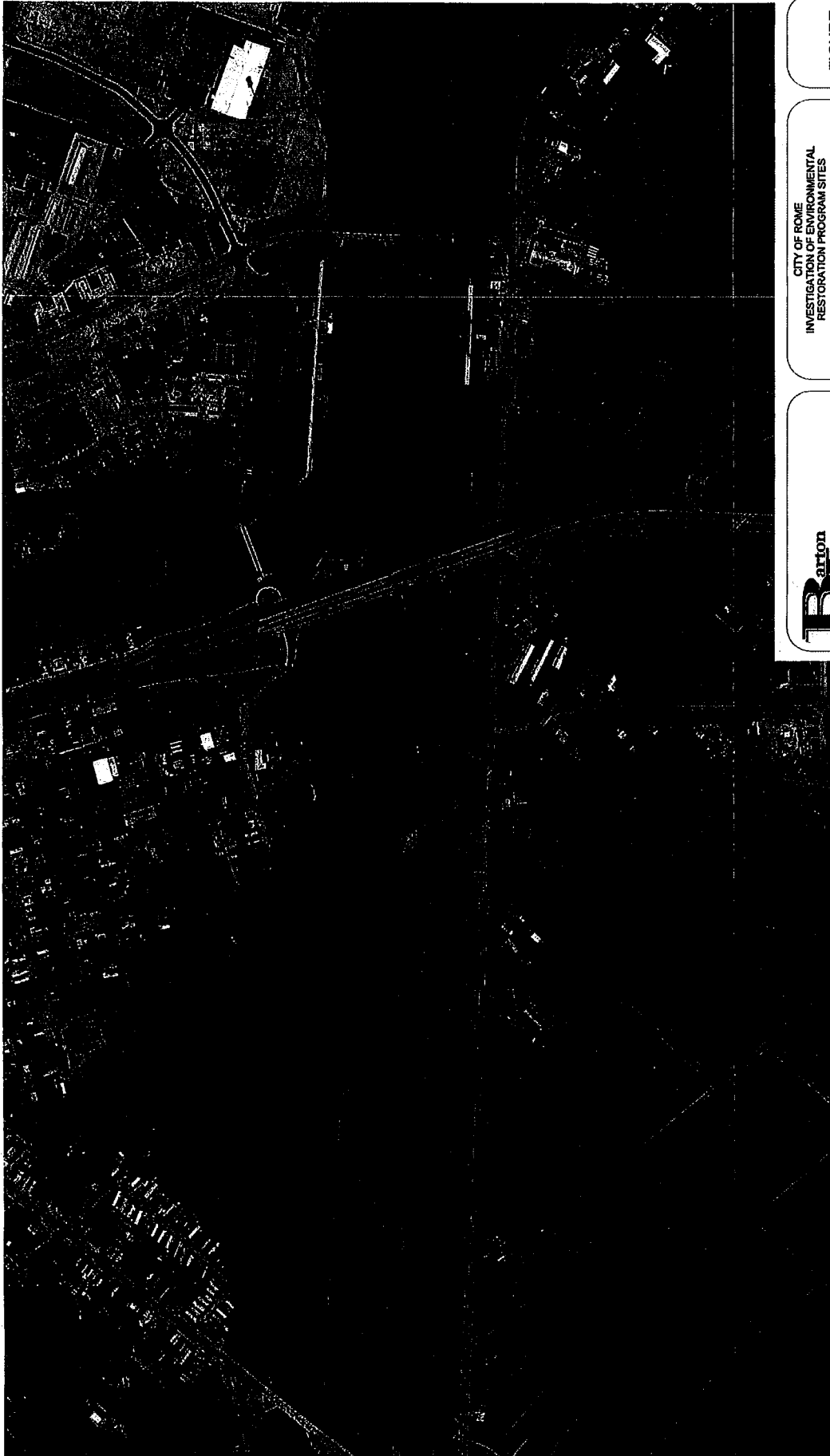
8. Land Use. When cleanup to pre-disposal conditions is determined to be infeasible, the Department may consider the current, intended, and reasonable anticipated future land use of the site and its surroundings in the selection of the soil remedy.

Since the anticipated use of the site is restricted residential, Alternative 2 would comply with this criterion by providing a site cover that is consistent with such use. Alternative 3 would remove the contaminated soil permanently and would make restrictions on the site use unnecessary.

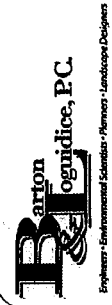
The final criterion, Community Acceptance, is considered a "modifying criterion" and is taken into account after evaluating those above. It is evaluated after public comments on the Proposed Remedial Action Plan have been received.

9. Community Acceptance. Concerns of the community regarding the investigation, the evaluation of alternatives, and the PRAP are evaluated. A responsiveness summary was prepared that describes public comments received and the manner in which the Department addressed the concerns raised, if any. The selected remedy does not differ significantly from the proposed remedy. Therefore, the ROD selected Alternative 2 as described above, because it satisfies the threshold criteria and provides the best balance of the balancing criterion.

Therefore, Alternative 2 is the selected remedy for this site.

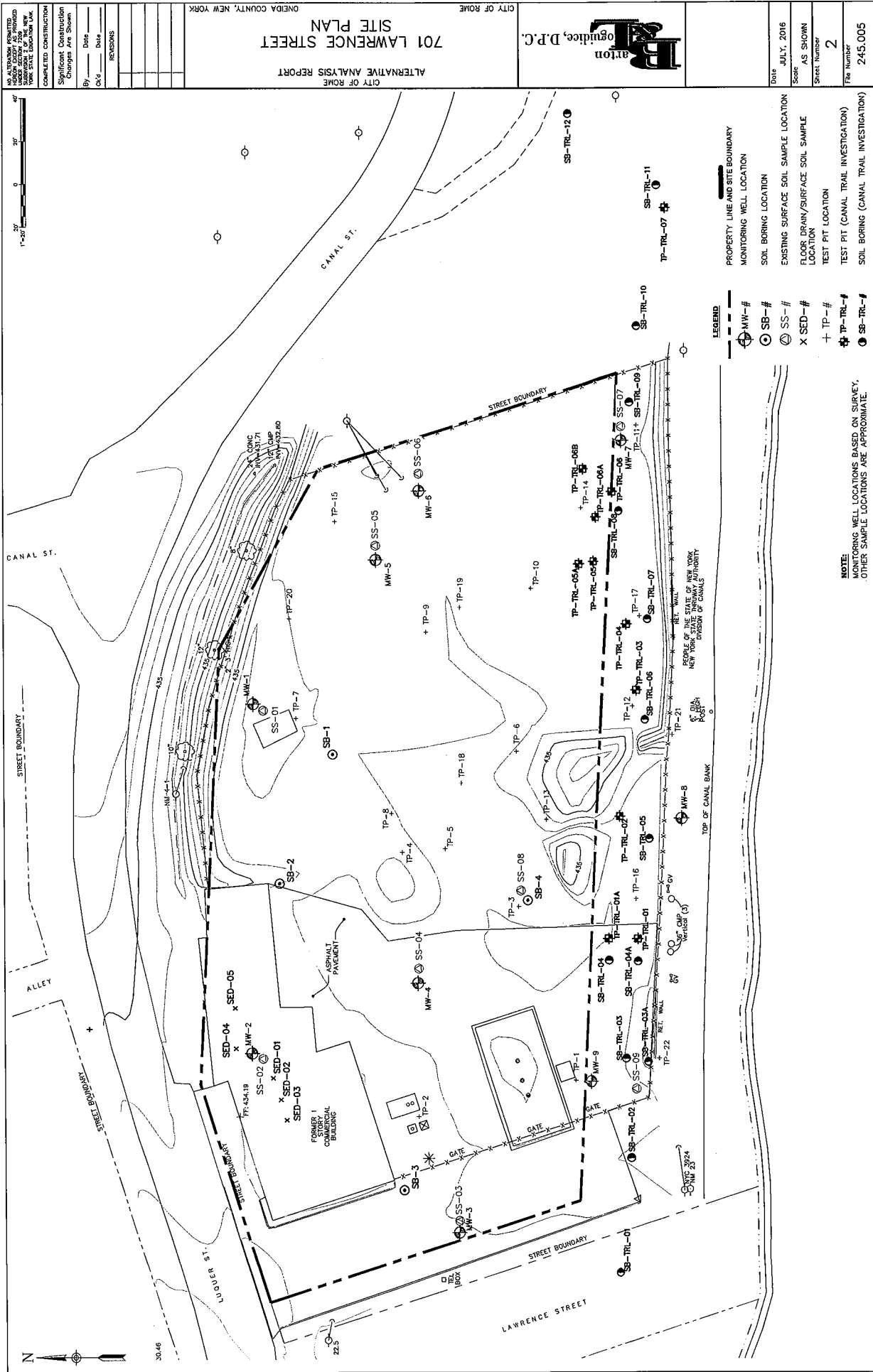


400 0 400 Feet



CITY OF ROME
INVESTIGATION OF ENVIRONMENTAL
RESTORATION PROGRAM SITES
LAWRENCE STREET SITE
CITY OF ROME ONEDA COUNTY, NEW YORK

FIGURE
1



NO ALTERATIONS PERMITTED UNLESS APPROVED BY THE DESIGNER AND THE CITY OF ROKE ENGINEERING, D.P.C.		CITY OF ROKE ALTERNATIVE ANALYSIS REPORT 701 LAWRENCE STREET SITE PLAN ONEIDA COUNTY, NEW YORK	
DATE: JULY, 2016		SHEET NUMBER: 2	
SCALE: AS SHOWN		THE NUMBER: 245.005	
COMPLETED CONSTRUCTION		SIGNIFICANT CONSTRUCTION CHANGES ARE SHOWN	
BY: [Signature]		DATE: [Date]	
CHK'D: [Signature]		REVISIONS:	



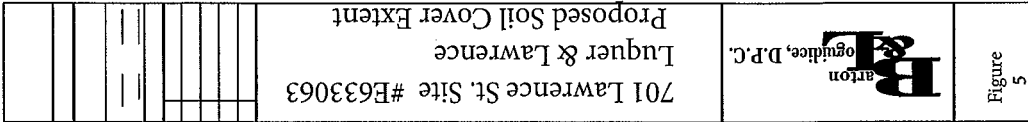


Figure 4

© 2016 Google

Google earth

Imagery Date: 5/13/2015 43°12'07.46" N 75°27'22.20" W elev 432 ft eye alt 995 ft



APPENDIX A

Responsiveness Summary

RESPONSIVENESS SUMMARY

701 Lawrence Street

Operable Unit Number: 01

Environmental Restoration Project

City of Rome, Oneida County, New York

Site No. E633063

The Proposed Remedial Action Plan (PRAP) for the 701 Lawrence Street Operable Unit Number 1 (OU-1) site was prepared by the New York State Department of Environmental Conservation (the Department) in consultation with the New York State Department of Health (NYSDOH) and was issued to the document repositories on December 22, 2016. The PRAP outlined the remedial measure proposed for the contaminated soil and groundwater at the Operable Unit Number 1 at the 701 Lawrence Street (OU-1) site.

The release of the PRAP was announced by sending a notice to the public contact list, informing the public of the opportunity to comment on the proposed remedy.

A public meeting was held on January 19, 2017, which included a presentation of the remedial investigation, alternative analysis (RI/AA) for the 701 Lawrence Street (OU-1) site as well as a discussion of the proposed remedy. The meeting provided an opportunity for the public to discuss their concerns, ask questions and comment on the proposed remedy. These comments have become part of the Administrative Record for this site. The public comment period for the PRAP ended on February 7, 2017.

This responsiveness summary responds to all questions and comments raised during the public comment period. The following are the comments received at the public meeting, with the Department's responses:

COMMENT 1: Please explain what is a site cover? How much of the site would contain a soil cover?

RESPONSE 1: A site cover may consist of soil in green spaces, parking areas, sidewalks, buildings, or a combination of all of them. A site cover eliminates the potential for exposure to contaminants which may remain in subsurface soil and will be handled by the site management plan. For a commercial use remediation, the required thickness of the cover is one foot. For the 701 Lawrence Street Site the entire site requires a cover, but the composition of the cover will depend on the development plan for the site. The extent of the soil cover largely depends on the development plan for the site after it is clean. The City or other developer may choose to temporarily install a site-wide soil cover until the site is fully developed.

COMMENT 2: Another Environmental Restoration Program (ERP) site recently completed in Rome in 2015 and has a crowned soil cover, what is the purpose of that?

RESPONSE 2: The comment is referring to the cover installed at 1201 East Dominick Street site (Site #E633065). The site remedy consisted of a temporary site-wide soil cover. The soil cover was installed at the site so that the City of Rome could proceed with the completion of the remedial program for the site and receive a Certification of Completion (COC) and associated liability releases granted under the ERP. The land use for this site was restricted residential, so a two foot soil cover was placed on top of the existing ground surface and was sloped towards the site boundary to provide proper drainage. Additionally, soil was excavated around the perimeter of the site to accommodate the required two feet of cover at the site boundary. This soil was placed underneath the cover and tapered to meet the existing grade at the property boundaries, resulting in the crowned look of the site. Should the site be developed in the future, the temporary cover could be replaced by sidewalks, buildings, parking area or in areas of green space, soil as provided for by the cover for this site.

COMMENT 3: What is the time schedule for the next phase of the project? What comes next?

RESPONSE 3: The Department is issuing the Record of Decision (ROD) which memorializes the remedy for the site. Following the ROD, the City of Rome can market the property to a potential developer who would have to implement the ROD remedy. They could do so by entering the Department's Brownfield Cleanup Program. The City may also apply to the ERP, which is being reactivated, to conduct the remedy. The ERP is not presently taking applications but is anticipated to be activated in the near future.

After the City and/or new owner applies to any of the programs mentioned above and is accepted, a revised project schedule will be prepared and approved by the Department for implanting the remainder of the remedial program. The remainder of the remedial program would consist of preparing a Remedial Design, followed by Remedial Construction to implement the remedy in accordance with the ROD.

COMMENT 4: Can the city enter into the Brownfield cleanup program (BCP)? Does the BCP allow for co-applicants with the City?

RESPONSE 4: The City can apply to enter the BCP to implement the remainder of the remedial program. The City could also be a co-applicant with a private developer in the BCP.

APPENDIX B

Administrative Record

Administrative Record

701 Lawrence Street (OU-1)

Environmental Restoration Project

City of Rome, Oneida County, New York

Site No. E633063

1. Proposed Remedial Action Plan for the 701 Lawrence Street (OU-1) site, dated December 21, 2016 prepared by the Department.
2. State Assistance Contract, Contract No. C303404, between the Department and the City of Rome, June 2007.
3. Barton & Loguidice, P.C. (B&L). 2008, Site Investigation Work Plan.
4. Barton & Loguidice, P.C. (B&L). 2012, Interim Remedial Measures (IRM) Construction Completion Report.
5. Buck Engineering, LLC. 2002, Limited Scope Environmental Assessment
6. Alternatives Analysis Report (AAR) prepared by Barton & Loguidice, P.C. (B&L), dated May 2015.
7. Citizen Participation Plan, May 2008.

None of the EPA Brownfield Cleanup funds will be spent on City personnel salaries or fringe benefits. The City will use 95% the EPA Brownfields Cleanup Grant funds for the performance of site cleanup activities which consist of the following:

- Installation of a Demarcation Layer (snow fencing): 8,972 square yards (SY) at a cost of \$2.25/SY. Estimated Cost = \$20,187.
- Placement/Compaction of an 18-inch thick layer of clean imported back fill: 6,000 cubic yards (CY) at a cost of \$24/CY. Estimated Cost = \$144,000.
- Placement of a six-inch thick layer of topsoil, seeding, and stabilization: 8,966 SY at a cost of \$5.50/SY. Estimated Cost = \$49,313.
- Field Inspection and Community Air Monitoring during Soil Cap Installation: Estimated 2-week duration by Consultant. Estimated Cost is \$7,500.
- Preparation of As-Built Drawings by Surveyor: Estimated Cost is \$6,500.
- Preparation of Final Cleanup Report: Estimated Cost is \$2,500.

The physical construction and installation of the soil cap at the 1.85 acre site is a fairly straightforward task that is estimated to take 4 to 6 weeks to complete. Therefore, the entire cleanup project from start to finish can be easily accomplished during the 3 year grant period. The specific output of this project will be the successful installation of the two-foot thick soil cap at the 701 Lawrence Street site in accordance with NYSDEC regulations, and the subsequent issuance of a Certificate of Completion (COC) by the NYSDEC which releases the site from the ERP and makes it immediately available for redevelopment.

3.d. Measuring Environmental Results (5 points)

The City will be able to easily track the progress and schedule of the cleanup activities at the 701 Lawrence Street site, as the construction sequence that will be followed in the installation of the soil cap is well defined and can be visually monitored. The issuance of a COC by the NYSDEC will signify the completion of the cleanup phase of the project. Similarly, the future redevelopment of the 701 Lawrence Street site as a multi-use facility to potentially include kayak and rowing storage spaces, along with a small commercial/residential mixed use complex can also be easily tracked by the City. Specifically, a developer has already expressed his interest to City officials to purchase and develop the site for the aforementioned purpose, and therefore once the cleanup activities have been completed the site development phase can begin. The developer will need to submit conceptual and final site design plans to the City Planning Board for review and approval, and therefore it will be easy for the City to monitor and track the progress and status of site development activities. The issuance of a Certificate of Occupancy from the City to the developer will memorialize the completion of site development activities.

4. Programmatic Capability and Past Performance (15 points)

4.a. Programmatic Capability (9 points)

4.a.i. Organizational Structure (5 points)

The City of Rome Department of Community and Economic Development maintains a staff that is able to ensure the timely and successful expenditure of funds and completion of the administrative and financial requirements associated with the project and grant. The City will retain the services of a Qualified Environmental Professional (QEP) to ensure the successful completion of the technical aspects of the cleanup project. Key City of Rome staff that are participating on this project include:

- **Project Manager - Diana Samuels, Planning Assistant:** Ms. Samuels has been with the City of Rome for 15 years, four of which have been in the Department of Community and Economic Development. Ms. Samuels is currently overseeing two other EPA Cleanup Grants

Jacqueline M. Izzo
Mayor

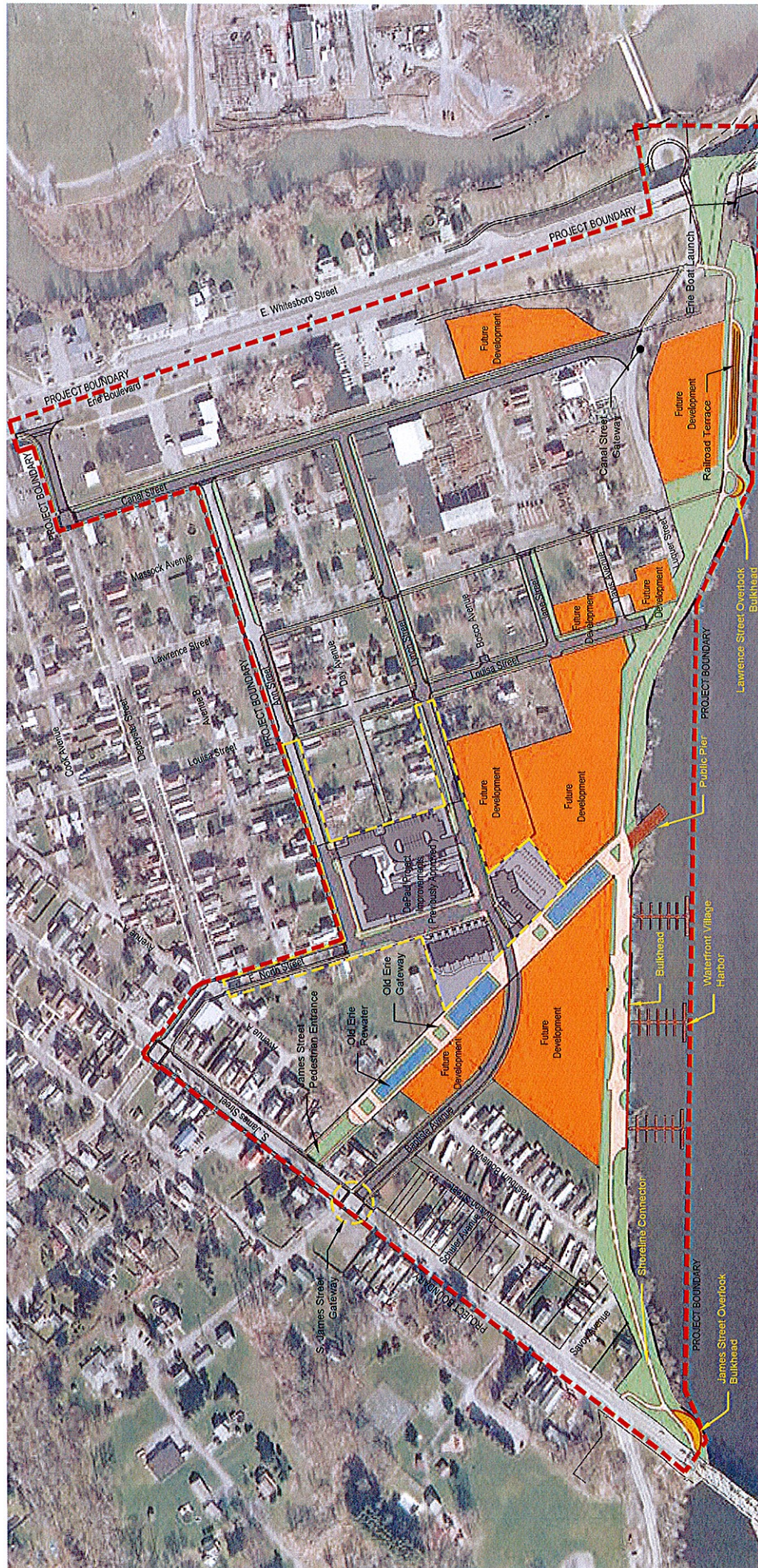


Matthew Andrews
Deputy Director of Community
& Economic Development

DEPARTMENT OF COMMUNITY AND ECONOMIC DEVELOPMENT

Rome City Hall, 198 N. Washington Street, Rome, New York 13440-5815
Telephone: (315) 339-7643 Fax: (315) 838-1167

The attached are the City of Rome Canal Waterfront Concept Plan and also the City of Rome Waterfront Village and Infrastructure Improvement Plan to give a perspective of how the City plans to revitalize its waterfront area, which includes 701 Lawrence Street to improve neighborhoods and the quality of life for residents and visitors alike.

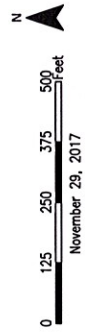


STREETSCAPE IMPROVEMENTS SCHEDULE:

- | | | | | |
|---|---|--|--|--|
| <p>S. JAMES STREET:</p> <ul style="list-style-type: none"> • NEW ORNAMENTAL LIGHTING AND STREET TREES - BOTH SIDES <p>BAPTISTE AVENUE:</p> <ul style="list-style-type: none"> • NEW ORNAMENTAL LIGHTING AND STREET TREES - BOTH SIDES • NEW SIDEWALKS AND CURBS - BOTH SIDES • NEW SIDEWALKS AND CURBS - BOTH SIDES • NEW SIDEWALKS AND CURBS - BOTH SIDES <p>ANN STREET:</p> <ul style="list-style-type: none"> • NEW SIDEWALKS AND CURBS - BOTH SIDES • NEW ORNAMENTAL LIGHTING AND STREET TREES - BOTH SIDES • NEW SIDEWALKS AND CURBS - NORTH SIDE | <p>LYNCH STREET:</p> <ul style="list-style-type: none"> • NEW ORNAMENTAL LIGHTING AND STREET TREES - BOTH SIDES • NEW SIDEWALKS AND CURBS - BOTH SIDES • NEW SIDEWALKS AND CURBS - BOTH SIDES • NEW SIDEWALKS AND CURBS - BOTH SIDES <p>LAWRENCE STREET:</p> <ul style="list-style-type: none"> • NEW ORNAMENTAL LIGHTING AND STREET TREES - BOTH SIDES • NEW SIDEWALKS AND CURBS - BOTH SIDES • NEW SIDEWALKS AND CURBS - BOTH SIDES • NEW SIDEWALKS AND CURBS - BOTH SIDES <p>DEPAUL STREET:</p> <ul style="list-style-type: none"> • NEW ORNAMENTAL LIGHTING AND STREET TREES - BOTH SIDES • NEW SIDEWALKS AND CURBS - BOTH SIDES • NEW SIDEWALKS AND CURBS - BOTH SIDES • NEW SIDEWALKS AND CURBS - BOTH SIDES | <p>DEPENYER STREET:</p> <ul style="list-style-type: none"> • NEW ORNAMENTAL LIGHTING AND STREET TREES - BOTH SIDES • NEW SIDEWALKS AND CURBS - BOTH SIDES • NEW SIDEWALKS AND CURBS - BOTH SIDES • NEW SIDEWALKS AND CURBS - BOTH SIDES <p>LOUISA STREET:</p> <ul style="list-style-type: none"> • NEW ORNAMENTAL LIGHTING AND STREET TREES - BOTH SIDES • NEW SIDEWALKS AND CURBS - BOTH SIDES • NEW SIDEWALKS AND CURBS - BOTH SIDES • NEW SIDEWALKS AND CURBS - BOTH SIDES <p>JANE STREET:</p> <ul style="list-style-type: none"> • NEW ORNAMENTAL LIGHTING AND STREET TREES - BOTH SIDES • NEW SIDEWALKS AND CURBS - BOTH SIDES • NEW SIDEWALKS AND CURBS - BOTH SIDES • NEW SIDEWALKS AND CURBS - BOTH SIDES | <p>DEPENYER STREET:</p> <ul style="list-style-type: none"> • NEW ORNAMENTAL LIGHTING AND STREET TREES - BOTH SIDES • NEW SIDEWALKS AND CURBS - BOTH SIDES • NEW SIDEWALKS AND CURBS - BOTH SIDES • NEW SIDEWALKS AND CURBS - BOTH SIDES <p>LOUISA STREET:</p> <ul style="list-style-type: none"> • NEW ORNAMENTAL LIGHTING AND STREET TREES - BOTH SIDES • NEW SIDEWALKS AND CURBS - BOTH SIDES • NEW SIDEWALKS AND CURBS - BOTH SIDES • NEW SIDEWALKS AND CURBS - BOTH SIDES <p>JANE STREET:</p> <ul style="list-style-type: none"> • NEW ORNAMENTAL LIGHTING AND STREET TREES - BOTH SIDES • NEW SIDEWALKS AND CURBS - BOTH SIDES • NEW SIDEWALKS AND CURBS - BOTH SIDES • NEW SIDEWALKS AND CURBS - BOTH SIDES | <p>DEPENYER STREET:</p> <ul style="list-style-type: none"> • NEW ORNAMENTAL LIGHTING AND STREET TREES - BOTH SIDES • NEW SIDEWALKS AND CURBS - BOTH SIDES • NEW SIDEWALKS AND CURBS - BOTH SIDES • NEW SIDEWALKS AND CURBS - BOTH SIDES <p>LOUISA STREET:</p> <ul style="list-style-type: none"> • NEW ORNAMENTAL LIGHTING AND STREET TREES - BOTH SIDES • NEW SIDEWALKS AND CURBS - BOTH SIDES • NEW SIDEWALKS AND CURBS - BOTH SIDES • NEW SIDEWALKS AND CURBS - BOTH SIDES <p>JANE STREET:</p> <ul style="list-style-type: none"> • NEW ORNAMENTAL LIGHTING AND STREET TREES - BOTH SIDES • NEW SIDEWALKS AND CURBS - BOTH SIDES • NEW SIDEWALKS AND CURBS - BOTH SIDES • NEW SIDEWALKS AND CURBS - BOTH SIDES |
|---|---|--|--|--|

City of Rome Waterfront Village

Infrastructure Improvement Plan





LAWRENCE STREET OVERLOOK

- FORTIFIED BULKHEAD OVERLOOK
- FISHING ACCESS
- SEATING AND SHADE TREES
- WAYFINDING AND HISTORICAL SIGNAGE



RAILROAD TERRACE

- FEATURE SEATING ELEMENT DOWN TO WATER WITH RECLAIMED IRON TIES



PUBLIC PIER

- NEW STRUCTURE WITH PUBLIC SPACE OVER THE CANAL
- INCLUDES WITH THE OLD ERIE CANAL ALUMNENT
- PROVIDES A PLACE FOR VISITORS TO EXPERIENCE THE CANAL, FISH AND RELAX



JAMES STREET PEDESTRIAN ENTRANCE

- GATEWAY PLAZA WITH SEATING AND ORNAMENTAL PLANTINGS
- WAYFINDING AND HISTORICAL SIGNAGE

OLD ERIE REWATER

- RESTORED CANAL BED WITH WATER
- SIDEWALK AND SEATING ALONG EAST AND WEST SIDE OF CANAL
- WAYFINDING AND HISTORICAL SIGNAGE



OLD ERIE GATEWAY

- PEDESTRIAN PLAZA WITH SEATING
- WAYFINDING AND HISTORICAL SIGNAGE

JAMES STREET OVERLOOK

- FORTIFIED BULKHEAD OVERLOOK
- FISHING ACCESS
- SEATING AND SHADE TREES
- WAYFINDING AND HISTORICAL SIGNAGE



SHORELINE CONNECTOR

- SHORELINE CONNECTOR WITH SEATING
- STEPPED SEATING ORIENTED TO THE WATERFRONT
- GREEN INFRASTRUCTURE AND PERMEABLE PAVING
- UNDERSTORY VEGETATION

WATERFRONT VILLAGE HARBOR

- FORTIFIED BULKHEAD WITH ELECTRIC AND WATER HOOKUPS
- DAY-USE DOCKS ALONG EAST SIDE OF HARBOR
- TERRACED PEDESTRIAN PROMENADE WITH HARDSCAPE DESIGN
- SEATING AND SHADE TREES



CANAL STREET GATEWAY

- TRANSPORTATION HUB FOR SHUTTLE CONNECTOR
- WELCOME DESIGN FEATURE
- WAYFINDING AND HISTORICAL SIGNAGE



ERIE LAUNCH

- FORTIFIED BULKHEAD
- CANAL LAUNCH DOWN TO CANAL
- FISHING ACCESS
- REGGATA AND NON-MOTORIZED LAUNCH
- PEDESTRIAN LIGHTING
- MURALS ON HIGHWAY ABUTMENT



KEY:

- BULKHEAD WALL
- PROMENADE OVERLOOK AND KEY GATEWAYS
- PROPERTY BOUNDARY
- FLOATING DOCK STRUCTURES

Application for Federal Assistance SF-424

* 1. Type of Submission:

- ☐ Preapplication
☒ Application
☐ Changed/Corrected Application

* 2. Type of Application:

- ☒ New
☐ Continuation
☐ Revision

* If Revision, select appropriate letter(s):

* Other (Specify):

* 3. Date Received:

01/30/2019

4. Applicant Identifier:

5a. Federal Entity Identifier:

5b. Federal Award Identifier:

State Use Only:

6. Date Received by State:

7. State Application Identifier:

NY

8. APPLICANT INFORMATION:

* a. Legal Name:

City of Rome

* b. Employer/Taxpayer Identification Number (EIN/TIN):

15-6000414

* c. Organizational DUNS:

0772976610000

d. Address:

* Street1:

198 N. Washington Street

Street2:

* City:

Rome

County/Parish:

NY

* State:

NY: New York

Province:

* Country:

USA: UNITED STATES

* Zip / Postal Code:

13440-5815

e. Organizational Unit:

Department Name:

Division Name:

f. Name and contact information of person to be contacted on matters involving this application:

Prefix:

* First Name:

Diana

Middle Name:

J.

* Last Name:

Samuels

Suffix:

Title: Planning Assistant

Organizational Affiliation:

City of Rome

* Telephone Number:

315-339-7646

Fax Number:

* Email:

dsamuels@romecitygov.com

Application for Federal Assistance SF-424

* 9. Type of Applicant 1: Select Applicant Type:

C: City or Township Government

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

* Other (specify):

* 10. Name of Federal Agency:

Environmental Protection Agency

11. Catalog of Federal Domestic Assistance Number:

66.818

CFDA Title:

Brownfields Assessment and Cleanup Cooperative Agreements

* 12. Funding Opportunity Number:

EPA-OLEM-OBLR-18-07

* Title:

FY19 GUIDELINES FOR BROWNFIELDS CLEANUP GRANTS

13. Competition Identification Number:

Title:

14. Areas Affected by Project (Cities, Counties, States, etc.):

Add Attachment

Delete Attachment

View Attachment

* 15. Descriptive Title of Applicant's Project:

Cleanup of 701 Lawrence Street site located at 701 Lawrence Street, Rome, NY 13440 - clean up for petroleum contamination.

Attach supporting documents as specified in agency instructions.

Add Attachments

Delete Attachments

View Attachments

Application for Federal Assistance SF-424**16. Congressional Districts Of:*** a. Applicant * b. Program/Project

Attach an additional list of Program/Project Congressional Districts if needed.

Add Attachment

Delete Attachment

View Attachment

17. Proposed Project:* a. Start Date: * b. End Date: **18. Estimated Funding (\$):**

* a. Federal	<input type="text" value="200,000.00"/>
* b. Applicant	<input type="text" value="40,000.00"/>
* c. State	<input type="text" value="0.00"/>
* d. Local	<input type="text" value="0.00"/>
* e. Other	<input type="text" value="0.00"/>
* f. Program Income	<input type="text" value="0.00"/>
* g. TOTAL	<input type="text" value="240,000.00"/>

*** 19. Is Application Subject to Review By State Under Executive Order 12372 Process?**

- ☐ a. This application was made available to the State under the Executive Order 12372 Process for review on .
- ☒ b. Program is subject to E.O. 12372 but has not been selected by the State for review.
- ☐ c. Program is not covered by E.O. 12372.

*** 20. Is the Applicant Delinquent On Any Federal Debt? (If "Yes," provide explanation in attachment.)**☐ Yes ☒ No

If "Yes", provide explanation and attach

Add Attachment

Delete Attachment

View Attachment

21. *By signing this application, I certify (1) to the statements contained in the list of certifications and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances** and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 218, Section 1001)**

☒ ** I AGREE

** The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

Authorized Representative:

Prefix: * First Name:

Middle Name:

* Last Name:

Suffix:

* Title: * Telephone Number: Fax Number: * Email: * Signature of Authorized Representative: * Date Signed: